

1375

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 1] SAT., JANUARY 2, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	1	Letters to Editor—	
Tilson Tilted ...	3	Coffee Drying Machinery ...	8
U.P.A.S.I. Sports Club ...	5	The Labour Department ...	8
Report on Department of		Motor Mileage ...	9
Agriculture 1924-5 ...	7	Planters' General Provident Fund	10
		Commercial and Meteorolo- gical ...	15

EDITORIAL NOTES

Calendars During the past fortnight we, and doubtless our Readers also, have received from firm friends and friendly firms more calendars than we can, or at any rate have tried to, count. Yet we wonder if they will suffice. They did not in previous years. We fear there have been few Januarys when we have not, under the urge of holiday arrears, hastily passed letters pre-dated by typists even more than wontedly behind the times. Indeed only a year ago a creditor's thanks were turned into protestations by a parallel mishap. His first communication fully appreciated our New Year resolution to liquidate a few of our oldest debts. His second enquired whether we were trying to be funny or were out to do him down. By a slip of the pen we had written '1924' for '1925' on a cheque; which the Bank of course dishonoured as time-barred! The resolution we made yesterday was not to try to become too good all at once.

To get back to the Calendar; we think it might be interesting if the Editorial Notes in the first issue of every month mentioned a few anniversaries—opening of railways or roads, inauguration or reorganization of U.P.A.S.I. departments or clubs, appointment and retirement of officials, obituaries, etc.—of outstanding interest from the South Indian Planting point of view. A U.P.A.S.I. calendar on these lines could be readily compiled, if Readers will kindly send us any data they possess.

Foreign Debts An article elsewhere in this issue details the arrangements under which Britain is liquidating her War Debt to the United States. Foreign obligations have not always been redeemed as a matter of course in the past.

Between 1830 and 1880, for instance, twelve of the United States (which owned between them a quarter of the National Debt) and a host of American cities and minor authorities repudiated debts which Sir Josiah Stamp estimates would stand to-day at over £400,000,000 if a fair rate of interest had been charged.

Protests it is true were raised, e.g. an article entitled 'Are we a Nation of Rascals?' in the North American Review of 1884; but the protests came to nought.

We collate as of interest to our Readers, various estimates of the production and consumption of rubber during 1925 and 1926. Some, e.g. Charles Hope's, are admittedly very tentative: others, e.g. The American Rubber Association, claim that their figures are correct subject to a margin of error of ten per cent:—

Authority	1925		1926	
	Production	Consumption	Production	Consumption
Rubber Association of America ...	574,000	540,000	606,000	575,000
A. W. Still ...	501,000	486,802	555,604	555,604
<i>The Times</i> (London) ...	500,000	560,000	...	...
<i>India Rubber Journal</i> ...	478,000	540,000	606,000	575,000
Charles Hope & Sons ...	489,000	553,600	...	664,000
Fearone & Co. ...	...	...	574,500	620,000
Crude Rubber and Foreign Produce Corp. of New York.	...	...	630,000	610,000
Gow, Wilson & Stanton ...	485,000	557,000	572,000	620,000
Average of the above ...	504,500	539,550	590,684	602,800

Considerable attention, the *Tropical Agriculturist* of Ceylon tells us, is being given at the present time in Ceylon to the question of manuring rubber. The issue of Mr. Ashplant's report on his visit to rubber countries, and particularly those sections of the report dealing with the question of manuring, has resulted in attention being redirected to this question. Ceylon planting opinion does not entirely agree with the views expressed by Mr. Ashplant, but nevertheless it is giving special consideration to what he says, and may undertake to lay down some manurial trials upon estates.

Sufficient is said to indicate that the actual effects of manures in rubber require much closer investigation, and the Department of Agriculture and the Rubber Research Scheme are prepared to co-operate with a limited number of estates which desire to lay out experimental areas. These must be on land of uniform character and trials must be sufficiently duplicated so as to enable probable errors to be ascertained. It is only by means of an adequate number of such trials that definite and precise information can be obtained on a matter of great importance to the rubber industry. The laying out of such trial areas must be very carefully thought out. In rubber experiments there are a large number of variables. The individuality of the different trees makes experiments exceptionally difficult and necessitates much duplication of plots. The individuality of the tapper has also to be

considered ; and also, in many areas, the previous tapping history of the trees. All such particulars must receive, and no doubt will receive careful consideration before the trials are begun.

The Director of Agriculture, Nyassaland, in his annual report for 1924 compares the existing acreages under coffee, rubber and tea with those which obtained in 1923 and 1914.

1924		1923		1914	
Crop	Acreage	Crop	Acreage	Crop	Acreage
Tea	5,093	Tea	4,235	Rubber	5,936
Rubber	1,795	Rubber	1,812	Tea	3,338
Coffee	424	Coffee	474	Coffee	1,559
Total acreage under the 3 crops.	7,312	...	6,521	..	10,833

Of tea, which apparently is the only one of the three crops not on the wane, the Director says :—

This crop continued to prosper, thanks to the high prices ruling on the home market. The export increased to just over 1,000,000 lb., whilst the local valuation of the export increased by nearly £20,000. The prosperity has been wisely utilized by many estates to improve the future of the industry and to forestall a later fall in prices. Extensions of cultivated areas, better provision for drainage, more extensive and up-to-date factory plant, and importation of seed of improved jats are some of the ways in which the progressive estates have acted wisely.

Whilst the areas of suitable land with favourable climatic conditions for this crop are not extensive, it is estimated that in the Mlanje district there are at least 45,000 acres capable of producing good tea, given the necessary capital and labour supply.

TILSON TILTED

A Reuter's cable states that the House of Representatives, i.e., the Lower House of the United States Legislature, has adopted a motion of Mr. Tilson, the Republican Leader, demanding an immediate investigation into the present Rubber Situation by a Committee of the House.

Mr. Tilson has been in close touch with Mr. Hoover, the Secretary for Commerce, who in a recent letter to Senator Capper calculated that America would import nine millions of pounds (thus a cable in *The Madras Mail* of December 16, 1925) of rubber in 1926 at a cost of £198,000,000 or £133,000,000 above a reasonable price. The cable as published is of course absurd ; and we assume Mr. Hoover estimates that America will this year have to buy 900,000,000 lbs. (say 402,000 tons) at a figure averaging 4s. 5d. instead of the 1s. 5d. which he would consider fair.

Even so recently as last June, it was of course perfectly competent for the Americans to cover all their 1926 requirements at a rate of 1s. 9d. c.i.f. U.S.A., and the quotation had only risen to 2s. 6d. by September 30, 1925; so that a large proportion of next year's deliveries must have been bought at considerably more than 2s. less than the price which Mr. Hoover assumes. It would seem therefore a justifiable assumption that Mr. Hoover's advisers have primed him with figures which were prepared by working backward from a pre-conceived result which would be useful for propaganda rather than by working forward from the actual—but for them unpalatable—truth.

Revenons a nos moutons. The cable regarding the adoption of Mr. Tilson's motion gives further statistics, for it proceeds to say that it was alleged in the preliminary debate that 'Britain was openly declaring her intention to collect four milliard dollars (i.e. \$4,000,000,000 or say £800,000,000. *Ed.*) in increased rubber prices to pay her war debt.'

In the circles adorned by the ardent orator who voiced this assertion, communistic propaganda may of course be rife. It may be honestly believed that the British Rubber Industry will be nationalized this year; and that Commissaries or Comrades will have supplanted Shareholders and be collecting any profits which may accrue! But, even so, we cannot see how any American—even the Spokesman of a group as credulous as we have imagined—could honestly say that Britain had 'openly proclaimed' her intention to collect \$4,000,000,000 from rubber profits; unless he could point to a statement to that effect which some accredited Minister of the Crown, authorized to speak on behalf of Britain, has publicly made.

Our debt to America stood at £856,000,000 when Mr. Baldwin arranged, and Mr. Bonar Law's Cabinet agreed to, its service by ten annual payments of 3 per cent and 52 of 3½ per cent interest plus an additional ½ per cent throughout the whole period as Sinking Fund. Payments are to be in dollars, will vary annually from \$160,000,000 to \$190,000,000, and will amount in the aggregate to \$11,105,800,000 or say £2,200,000,000. The payments made in 1923, 1924, and 1925 amounted to close on £100,000,000; so that each of the 59 payments still impending will average some £35,000,000.

In other words Mr. Tilson's protagonist says that Mr. Hoover's figure of 4s. 5d. per lb. is applicable not only to 1926 but also up to and including 1984, when the last payment falls due. And yet 1927 and 1928 requirements can to-day be respectively bought at just over 2s. 1d. and 2s. per lb.!

We trust that these details of the debt will be of interest and use to our Readers who have probably seen and will see again wild references paralleling British profits on Rubber to Britain's American Debt. They would also, if assimilated in the proper quarter, relieve certain diatribists of the gloomy forebodings which appear to obsess them, afford a saner outlook on the future, and even perhaps enable them to envisage with recovered optimism a succession of many

PROSPEROUS NEW YEARS

U. P. A. S. I. SPORTS CLUB

PLANTERS' WEEK, 1926

Mr. MURPHY'S BALL

INVITATION

Members of the Planting Community who will be coming to Ootacamund for the Week are requested by Mr. J. J. Murphy to give him the pleasure of their company at a Ball to be held at 'Woodside' on Wednesday, 24th February, at 9.30 p.m.

R. S. V. P. to—

G. W. FULCHER,

WOODBRIAR ESTATE,

DEVARSHOLA P.O.

Accommodation at 'Woodside' being limited, acceptances should please be sent in as soon as possible in order to allow the Dance Committee to make the necessary arrangements.

U.P.A.S.I. SPORTS CLUB

Planters' 'Week' 1926.—(*continued*)

FANCY DRESS BALL.—Their Excellencies the Governor and the Viscountess Goschen are pleased to give the first prizes again this year.

The second prizes, as already published, are being given by Capt. Windle.

'WINDLE' (LADIES') GOLF CUP.—Capt. Windle has also kindly offered a Cup for Ladies' Open Golf Singles to be played for during the Meet.

Conditions—

1. Open to all ladies belonging to the families of Planters who are members of the U.P.A.S.I.
2. 15 holes—final 30 holes.
3. To be played under the Local Rules of the Ooty Golf Club.
4. The competition to be under the management of the U. P. A. S. I. Sports Club Committee, and in the event of any dispute arising, the matter shall be referred thereto.

THE 'PINCHES' CUP.—Mr. H. L. Pinches has also very kindly offered a Cup for tennis during the week. Unfortunately, the Committee can find no room for fitting in another cup for tennis. We are full up. It has been suggested to Mr. Pinches that his offer be accepted for a 'Men's Open Golf Singles' Competition, which could be played after the inter-district competition is finished.

'HARPER' TENNIS CHALLENGE CUP.—

Conditions—

1. The competition shall be open to all members of the U. P. A. S. I. Sports Club and shall be played annually during Planters' Week.
2. It shall consist of open singles, each match to be the best of three setts.
3. Any competitor who wins the competition two years in succession shall thereafter be handicapped 'owe 15'.
4. The Cup shall become the property of any competitor who either wins the competition three years in succession or five years in all.
5. A miniature cup will be presented each year to the winner.
6. In the event of any dispute arising, the matter shall be referred to the U. P. A. S. I. Sports Club Committee, whose decision shall be final.

G. W. FULCHER,

Honorary Secretary.

REPORT ON THE DEPARTMENT OF AGRICULTURE FOR THE YEAR 1924-5

As the Scientific Officers at work on Rubber, Coffee and Tea are now either appointed by or seconded for service with the U.P.A.S.I., and publish their own reports; the Director of Agriculture's Annual Report is not as engrossing as its predecessors from the Planting point of view. Mr. Hilson's resumé, however, of the excellent work accomplished on behalf of the ryots by Mr. Anstead's Department in 1924-5, contains the interesting *obiter scripta* which we reproduce below:—

Manurial Investigations

Calcium cyanamide.—Field experiments with this manure alone and in conjunction with soluble phosphates were tried. The results show that a very definite increase of yield can be obtained by the use of this manure, but that its price is against its extensive use.

Phosphates.—Superphosphate used alone was found to have a depressing effect on the yield wherever used. Experiments with Trichinopoly phosphate and Tetra phosphate gave encouraging results.

Farm yard manure.—The experiments on the method of storing this manure were continued. As has been found previously the box system yields the most satisfactory results.

Experiments to test the influence of various chemicals in inhibiting the loss of nitrogen from farm yard manure showed that no loss occurred if sulphur was mixed with the manure. The quantity used was however high.

Artificial farmyard manure.—The experiments were continued. It was found that when cattle dung was used to supply the starter nitrogen there was no loss of nitrogen from the material as in the case with calcium cyanamide.

Availability of different organic manures.—Tests carried out this year with the following oil-cakes, groundnut, castor, pungam, ganja and with fish-guano and hornmeal indicated that groundnut cake was the most satisfactory.

Manurial requirements of cocoanuts, plantains and cotton.—Analyses of the different parts of these plants at different stages of growth were made in order to determine which plant foods these crops made most demand.

Potash and phosphoric acid for cocoanuts, potash and lime for plantains and nitrogen, lime potash and phosphoric acid for cotton appear to be the plant foods upon which most demand is made.

Trichy phosphatic nodules.—The field work referred to in last year's report was interfered with by the floods. Pot culture experiments using Cuddapah slab frames sunk in the field itself instead of pots are being carried out by M. R. Ry. Rao Sahib M. R. Ramaswami Sivan Avargal, the Lecturing Chemist.

Planters' Crops

Rubber.—Mr. H. T. Ashplant continued in charge of the research work on rubber mycology throughout the year.

The most important work of the year has been the spread of the practice of spraying with bordeaux mixture to check secondary leaf-fall. So successful have been the results that it is expected that this season with very few exceptions on every estate a greater or less proportion of the acreage will be sprayed. There are 76 spraying machines in operation. It is estimated that before the spraying season closes approximately 4,000 acres of rubber from 9 to 20 years old and about 6,000 acres of less mature rubber will have been sprayed.

A manuring experiment to test the value of nitrate of soda for rubber was started. An anti-drip device for reducing the loss of crop during the monsoon was invented.

The investigation of the anatomy of hevea bark and of the budding of hevea was continued. In regard to the latter the Rubber Mycologist is now in a position to give instruction in the most suitable method.

In order to determine whether the destructive distillation of rubber has economic possibilities several tests with scrap rubber were carried out. The results were not favourable, the product obtained being less valuable than the material used.

LETTERS TO THE EDITOR

Coffee Drying Machinery

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

I shall be very much obliged if any of your readers who have had experience in the use of coffee drying machinery will give me their opinion of same; do they find the Dryer works satisfactorily and how does the quality of machine-dried compare with sun-dried coffee?

BALAYATRIE ESTATE,
MERCARA, N. COORG,
December 22, 1925.

Yours, etc.,
E. M. GRAY.

The Labour Department

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

I regret that the part of my report, rightly objected to by 'J.H.S.' in your issue of the 19th instant, should have been published in the *Planters' Chronicle*.

I did not realize at the time of writing the report, that it would be published.

KESINVURTHY ESTATE,
SANTAVERI, KADUR,
December 22, 1925.

Yours, etc.,
R. O. OLIVER.

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

It has been brought to my notice that my statement of the impression that officials made money out of T.A. is contrary to fact, and I hasten to apologise. I thought that T.A., like mileage, was also a fixed sum arranged by the powers above, whereas apparently only actual expenses are charged. The argument was only one of mileage, and it still appears that this is fixed much above actual cost both for officials and for the army; with the Upasi following some way behind.

SOMWARPET,

December 24, 1925.

Yours, etc.,

L. NEWCOME.

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

For the benefit of his fellow-planters I trust that you will persuade Mr. Tipping to furnish you for publication full details showing how his running cost of 4.75 annas per mile is made up.

From what he tells us the cost of his driver is	...	...	1.40
I do not know if he will agree that 50,000 miles is sufficient to reckon as the life of a car costing say Rs. 4,500	...	...	1.44
Petrol cost depends on miles run to the gallon but 20 miles per gallon costing Rs. 1-13-0 is	...	...	1.45
If the insurance costs Rs. 125 it adds	...	...	.23
Oil I should expect to vary very little 400 miles for a gallon costing Rs. 5-10-0	...	...	.22
TOTAL			4.74
Leaving to meet cost of tyres, repairs, grease and all other incidental charges	...	...	.01
Cost per mile in annas			4.75

Unfortunately in my own case tyres and repairs cost me more than 3 annas per mile.

Yours, etc.,

HOW IS IT DONE?

December 31, 1925.

GENERAL PROVIDENT FUND FOR PLANTERS

(Concluded from page 947, issue of December 26)

The following provisions relate to Employers' contributions, viz. :—

(a) An Employer who elects to contribute to the Fund shall do so in respect of all the Members of his Staff who are eligible for membership and willing to contribute.

(b) The Employer shall himself contribute and pay to the Fund on the last day of each month a sum equal to the aggregate of the Members' ordinary contributions of his staff paid over by him to the Fund in respect of that month.

(c) Failure to pay over or pay contributions to the Fund within seven days of the due date shall render the Employer liable to be called upon by the Trustees to pay compound interest at the rate of 5 per cent per annum on the overdue contributions.

(d) An Employer who has agreed to contribute to the Fund in respect of the Members of his Staff may cease to make such contributions on giving 12 months' written notice to the Trustees (expiring on the 30th June or 31st December) but he shall still collect and forward the contributions of any of the Members of his Staff who may continue to contribute to the Fund. The Trustees in their discretion may allow such Employer to resume contributing to the Fund at a later date on such terms as they may think fit.

A Member shall not be bound to continue to contribute to the Fund if any of the following events shall happen, viz. :—

(a) If the Employer of a Member, who is otherwise eligible, discontinues making contributions to the Fund.

(b) If a Member enters the employment of an Employer who does not contribute to the Fund.

(c) If a Member, being in Malaya, is out of employment; but any such Member may continue to contribute to the Fund if he so desires and the Trustees shall have power to make such arrangements with him as in their opinion the necessities of his case may require.

13. ADDITIONAL CONTRIBUTIONS.—The Trustees may receive from Members additional contributions in multiples of \$50, and such additional contributions shall rank for a share of the income of the Fund as from the 1st July or 1st January, as the case may be, next following their receipt by the Fund.

14. ABSORPTION OF OTHER FUNDS.—The Trustees shall have power in their discretion to take over from the Trustees of any other Provident Funds, existing for the benefit of persons entitled to Membership under Clause 11 hereof, any amounts standing at the credit of such persons, provided that the latter agree in writing to become Members of the Fund and such persons and their employers agree to be bound by its rules, in which case the amounts so taken over shall be credited to their respective accounts as 'additional contributions.'

15. MEMBERS' ACCOUNTS.—An account shall be kept in local currency for each Member of the Fund and shall be credited with:—

(a) His own Members' ordinary contributions to the Fund.

(b) His additional contributions (if any).

(c) His Employers' contributions.

(d) His proportion of the income of the Fund as hereinafter provided after deduction of the costs, charges and expenses mentioned in Clause 3.

(e) The amount received under any policy ;

and such account shall be debited with any insurance premiums which may be paid in respect of any policy on the life of the Members as hereinafter provided. Any Member shall be entitled to receive not more often than twice in every year a detailed statement of his individual account on making written application to the Secretary.

16. LIFE INSURANCE.—After completing three years' membership, each member of the Fund, who enters upon his first term of engagement in the Plantation Industry in Malaya after the inception of the Fund shall, save in exceptional circumstances in which the Trustees may, in their absolute discretion, grant exemption, be bound to effect, with such insurance company or society as the Trustees may from time to time determine, an endowment insurance on his life for £800, with profits, payable at the age of 50 (with an option for conversion into an annuity with the approval of the Trustees). The annual premium on such policy shall be charged to the Member's account and shall be paid by the Fund, which will be responsible for the upkeep of the policy so long as the account of the member is in credit sufficiently to meet the premiums as they fall due. It shall be optional for those Members who are actually employed in the Plantation Industry at the date of the inception of the Fund to effect insurance for such amount and upon such conditions as they, with the approval of the Trustees, may think fit; and, in the event of any such Member having already taken out an endowment policy with a company which is approved by the Trustees, he may, subject to the approval of the Trustees, assign such policy to the Fund, which will thereafter be responsible for its upkeep so long as the Member's account is sufficiently in credit. In the event of a Member's account not being sufficiently in credit to meet any premium when falling due, whether in respect of a policy originally taken out in the name of the Fund or of a policy assigned to the Fund, the Trustees may make such arrangements for the surrender of or dealing with the policy as they may deem advisable in the circumstances, and may, if they think fit, apply the moneys of the Fund to prevent the policy from lapsing, but any sum so paid out of the Fund in excess of the amount standing to the Members' credit together with interest thereon at the rate of 5 per cent per annum shall be a charge on such policy provided that the Trustees shall not be under any obligation to maintain any policy. All policies effected under this clause shall be in the name of the Fund and be kept at the registered office of the Fund.

17. THE FUND.—The aggregate sum arising from contributions from Members and their Employers, from interest received on the investments of the Fund and from all other moneys received in accordance with these Rules, shall constitute the Fund.

18. INVESTMENTS.—The Trustees shall invest the Fund—

(a) In or towards the payment of premiums on the policies, as aforesaid, on the lives of Members whose accounts are sufficiently in credit therefor.

(b) In trustee securities recognized as such in the United Kingdom and/or Malaya.

(c) On deposit with any bank approved by the Trustees.

And the Trustees shall have power within these limits to vary the investments from time to time, and to employ the Bankers of the Fund or any trust company or similar institution approved by the Trustees to invest the moneys of the Fund on their behalf. No Trustee shall be liable for any loss arising from or contingent upon any investment made in accordance with these Rules, unless such loss has been occasioned by his wilful negligence or fraud. Investments of the Fund shall be registered either in the name of the Fund or in the name of the Bankers of the Fund or the nominees of such Bankers, or in the name of any trust company or similar institution approved by the Trustees.

19. RE-VALUATION OF INVESTMENTS.—The investments of the Fund, other than life policies, shall be revalued by the Trustees at the 30th June and 31st December in each year at the closing mid-prices (taking London prices for British Securities and Singapore prices for Malayan Securities) on those dates and any investments sterling shall for this purpose be converted into local currency at the rate of exchange prevailing at the date of such valuation. At the end of each half-year ending the 30th June and 31st December, the net income of the Fund received by the Trustees during such half-year (including any amount brought forward from the previous half-year) shall be placed to the credit of the accounts of the various Members of the Fund being distributed subject to the provisions of Rule 13 *in proportion to the amounts standing to the credit of each* in the books of the Fund at the end of such half-year. The Trustees shall, however, have power before arriving at the amount of such net income to allocate to or from Reserve such amount as they may think necessary to provide for variations in the values (whether realized or otherwise) of the securities of the Fund or for other contingencies; and they shall also have power to carry forward each half-year such amount as they may deem advisable not exceeding an amount equal to a dividend at the rate of one-fourth of one per cent. per annum.

20. MEMBERS' BENEFITS.—PARTIAL BENEFITS.—Subject to the provisions of Rules 22 and 23, a Member who gives notice and satisfies the Trustees that he is *withdrawing permanently* from the Plantation Industry in Malaya before completing five years' continuous service in it and who has not attained the age of 60 years shall cease to be a Member of the Fund and shall receive—

(a) The endowment policy (if any) on his life, or the net proceeds thereof realized by surrender or other disposal by the Trustees.

(b) The net amount of his own contributions (both members' ordinary and additional) after deduction of the full amount of premiums paid (if any) in respect of the policy on his life.

(c) The proportionate share of income in respect of the last-mentioned net contributions.

But he shall not be entitled to receive his Employer's contributions nor the proportionate share of income thereon.

Subject as aforesaid a Member who gives notice to and satisfies the Trustees as aforesaid, after completing five years' service but less than ten continuous years in it, but before attaining the age of 60 years shall, in addition to what is set out in the above sub-sections (a), (b), and (c), receive

one-half or at the discretion of the Trustees such larger proportion as they may decide of his Employer's contributions and the proportionate share of income thereon.

FULL BENEFITS.—Subject to the provisions of Rules 22 and 23, a Member who attains the age of 60 years or who before reaching that age satisfies the Trustees that he is *withdrawing permanently* from the Industry after completing 10 years' continuous service therein in Malaya and the legal personal representatives of any Member who dies at any period of his service shall be entitled to his endowment policy (if any), or the net moneys received in respect thereof, and to the full amount standing at his credit in the books of the Fund in respect of his own contributions, his Employer's contributions and the income on them after deduction of premiums paid on the policy in relation to his life. Absence from Malaya on furlough shall be considered as service in Malaya for the purpose of this Rule.

21. FORFEITED CONTRIBUTIONS AND RESERVE ACCOUNT.—Any amounts which may stand to the credit of Members but which may not be paid to them in consequence of their only being entitled to receive partial benefits under Rule 20 and any amounts which may be forfeited under Rule 23 hereof shall be transferred to Reserve Account, to which Account shall also be transferred profits or losses on realization of investments and any amounts which the Trustees may decide to transfer under the provision of Rule 19 hereof. The amount standing at the credit of Reserve Account from time to time shall not rank for any share of dividend other than the allocations aforesaid.

22. WITHDRAWAL FROM THE FUND.—A Member proposing to withdraw from the Fund under Rule 20 shall notify the Trustees of his intention in that behalf, and claim to have his interest in the Fund paid over to him. On receipt of such notice, the Trustees shall inform the Member's last Employer of its receipt, giving him notice that on a specified date they will pay out to such Member his share of the Fund. The Trustees shall effect settlement with the Member on the date specified, unless previously restrained by an injunction obtained by the last Employer.

23. MEMBERS' INTERESTS IN THE FUND NOT TO BE PLEDGED OR DRAWN AGAINST.—No Member shall be entitled to transfer or assign by way of security or otherwise any part of his interest in the Fund. In the event of any such transfer or assignment being made, the whole interest in the Fund of the Member making it shall forthwith be forfeited to the Fund and transferred to the Reserve Account. Subject to the provisions of Rule 22, if any attachment, garnishée order or process be served upon the Trustees or Secretary of the Fund resulting in the whole or any part of the interests of a Member being thereby attached, the whole of the interests of such Member in the Fund shall *ipso facto* be forfeited to the Fund. Provided always that the Trustees may in their absolute discretion at any subsequent date apply the whole or any part of the interests so forfeited for the benefit of the Member or his dependents as they shall think fit.

24. ALTERATION, REPEAL AND REVISION OF RULES.—The Trustees may in their discretion alter or repeal any of these Rules or make such additional Rules as they may think desirable, but no such alteration or repeal shall have retrospective effect or affect the rights of Members under the existing Rules prior to the date of the passing and notification to the Members of such alteration, repeal or addition. To become effective, every such additional Rule or alteration or repeal of existing Rules must be passed by a three-fourths majority of all the Trustees and confirmed by the Association and a majority of the Members.

25. **CLAIMS AND DISPUTES.**—Any question of doubt or difficulty which may arise with regard to a claim by a Member or his legal personal representative or any dispute of difference of opinion respecting the meaning of these Rules or the rights and obligations of Members or Employers thereunder shall be referred through the Trustees to the Arbitration of the Association, whose decision shall be final and conclusive thereon. In the event of the Association declining to act in any such case, the question or dispute shall be referred to arbitration in accordance with the English Arbitration Act of 1889 or any subsisting modification or re-enactment thereof.

26. **POWER OF DETERMINATION.**—The Fund may be wound up at any time in the event of a meeting of the Employers who contribute to it resolving by a three-fourths majority of those present in person or by proxy upon such winding-up, provided that not less than three months' notice of such meeting (which shall be held in London) be given to all such Employers and to all the Members of the Fund specifying the business for which the meeting is called. Proxies shall be available for use at such meeting, and any person may act as proxy at any meeting under these rules. The quorum for such meeting shall be three-fourths of the Employers present in person or by proxy, provided that if at any meeting the requisite quorum is not present within fifteen minutes from the time appointed for the meeting, the meeting shall stand adjourned to a day, time and place to be fixed at the meeting by the Chairman, and the persons present at such adjourned meeting, whatever their number, shall constitute a quorum for such meeting, and no notice of such adjourned meeting need be given. Provided that such adjourned meeting shall be held not less than one month from the date of the first meeting.

27. **WINDING UP.**—In the event of the Fund being wound up, each Member shall be entitled to the benefits in accordance with that section of Rule 20, which would apply to his case in the event of his withdrawing from the Plantation Industry on the same date as that of the resolution for the winding up of the Fund. In the event of the assets being more than sufficient to provide for such benefits, the surplus shall be divided among the Members in the same proportions. In the event of the assets being insufficient to discharge the liabilities of the Fund the benefits shall abate rateably, and in the event of there being no other sufficient assets to meet liabilities of the Fund (other than Members' benefits) the deficiency shall be recovered and shall be deducted rateably from the amount received from the policy taken out in relation to each Member's life and subject thereto a Member shall be entitled to receive the policy on his life or at his option the value thereof.

28. Any notice or other document required to be given under these rules to the Trustees, Employers or Members shall be sufficiently given if sent by post to the addresses appearing in the books of the Fund, and any such notice shall be deemed to have been served on the day when the same would in the ordinary course of post have reached the address to which it is sent.

29. Unless previously wound up, the Fund shall be wound up on the death of the last of the lineal descendants of King George V now living.

30. **CONTRIBUTORS TO ACCEPT RULES.**—A copy of these Rules, as amended from time to time, shall be supplied to every Member and every Employer who contributes to the Fund, and they shall, in writing, signify their assent to be bound by the Rules of the Fund and any alterations or amendments thereto duly made under the provisions of these Rules.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending December 26th, 1925

Bank Selling Demand Draft on London

21st	22nd	23rd	24th	25th	26th
18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	Holiday.	Holiday.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending December 5, 1925	January 1 to December 5, 1925	January 1 to December 5, 1924
TEA (WEEK ENDING DECEMBER 5, 1925)		s. d.		s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 8·26	1 5·52	1 7·77
Pannimade ...	154	1 8½	S. India	1 8·30	1 5·48	1 6·89
			Ceylon...	1 10·71	1 8·01	1 8·65
			Java ...	1 3·16	1 0·67	1 3·35
			Sumatra.	1 8·16	1 4·39	1 5·81
			Nyassa-land.	1 4·21	1 1·23	1 4·57
(b) Central Travancore			Total ...	1 8·63	1 5·92	1 7·64
Karimkulam ...	250	1 7½				
Nellikaye ...	90	1 7½				
Mlamallay ...	101	1 7¼				
Haileyburia ...	82	1 7				
(c) Kanan Devans—						
Letchmi ...	126	1 10¾				
Munnar ...	142	1 9½				
Kalaar ...	147	1 9				
(d) Mundakayam—						
Yendayar ...	87	1 6¾				
(e) Nilgiri-Wynaad—						
Daverashola ...	144	1 10¼				

(b) SPECIAL COFFEE CABLE

LONDON, DECEMBER 30, 1925

'A' COFFEE

140s. PER CWT.

MARKET QUIET

(c) *Précis of reports on the London Markets received on December 28 and covering the week ending Wednesday, December 9 :—*

(1) *Tea.*—Prices advanced slightly for the lower grades which were in very keen demand. The market for finer descriptions remained steady ; though a slight falling off in quality resulted in a corresponding setback in price.

(2) *Rubber.*—London stocks increased by 32 tons to 3,831 from 3,799 which was we believe the lowest point reached for over 10 years and would only meet the requirements of the world for two days. The price was markedly stronger than during the week we reviewed in our last issue, reaching 4-7 $\frac{3}{4}$ a lb.

(3) *Coffee.*—No East Indian was offered during the week ; but Kenyan's were in very keen demand owing to the disappointing nature of the new Costa Rica crop and fetched high prices ; while for the same reason other East Africans were also in keen demand. The following are the East Indian Statistics for the 11 months ending November 30, 1925, as compared with the corresponding figures of the previous two years :—

		1923	1924	1925
Landed	... Tons	3,351	1,545	4,475
Delivered	... „	3,890	1,814	2,544
Stock	... „	512	156	1,982

The London stocks and the world's visible supply of all kinds of coffee on November 30 were respectively 10,380 and 295,175 tons ; as against 5,370 and 322,760 on the same date last year ; and 9,805 and 285,115 on November 30, 1923.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, December 19, 1925

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	0·00	91·38	91·38	19. Coonoor ...	0·49	70·02	70·51
2. *Tenmalai.	98·83	0·00	98·83	20. Kotagiri ...	0·42	57·46	57·88
3. Mundakayam.	0·97	148·02	148·99	21. Ootacamund	0·07	48·74	48·81
4. *Peermade.	0·00	169·60	169·60	22. Yercaud ...	0·36	49·76	50·12
5. Twyford ...	N.R.	200·99	N.R.	23. Devala ...	N.R.	130·29	N.R.
6. V'periyar ...	N.R.	80·39	N.R.	24. Gudalur ...	0·00	73·35	73·35
7. Kalaar ...	0·99	209·33	210·32	25. CALICUT ...	0·00	134·37	134·37
8. Chittuvurrai	0·10	55·80	55·90	26. Kuttiyadi ...	0·00	178·34	178·34
9. BODI'KANUR	0·07	25·16	25·23	27. Vayittiri ...	N.R.	159·76	N.R.
10. COCHIN ...	0·12	109·06	109·18	28. Manantoddi.	0·00	110·85	110·85
11. *Mooply ...	0·00	113·15	113·15	29. Billigiris ...	0·12	64·09	64·21
12. MooplyValley	N.R.	124·11	N.R.	30. *Sidapur ...	0·00	N.R.	N.R.
13. Pachaimalai	N.R.	122·86	122·86	31. Pollibetta ...	N.R.	85·38	N.R.
14. Mudis ...	0·00	200·56	200·56	32. Somwarpett	0·00	84·21	84·21
15. POLLACHIE.	0·00	29·91	29·91	33. Ballupete ...	0·24	75·62	75·86
16. Manjeri ...	0·00	125·76	125·76	34. MANGALORE.	0·00	138·33	138·33
17. Nilambur ...	N.R.	101·11	N.R.	35. MADRAS ...	0·43	60·99	61·42
18. Naduvattam	0·00	83·11	83·11				

W = During the week.

P = Previously.

N.R. = No return.

* = U.P.A.S.I. Ex. Station.

[As owing to the holidays only 2 Estates (Chittuvurrai and Pollibetta) and no Government returns have been received for the week ending December 26, we reproduce the statement for the period April 1-December 19, 1925. *Ed.*]

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 2] SAT., JANUARY 9, 1926. [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	17	Extraordinary General Meeting of Shevaroy Planters' Association ...	26
Coffee ...	20	District Notes—	
Nitrogen—Its Importance in Agriculture ...	22	A. North Coorg ...	26
Tea Withering and Typical Fans ...	23	B. South Coorg ...	27
U.P.A.S.I. Sports Club—		C. South Travancore ...	28
Competitions ...	25	Letter to Editor—	
Rugby Football 'Corver' Cup ...	25	Motor Mileage... ...	30
		Commercial and Meteorological ...	31

EDITORIAL NOTES

We tender our hearty congratulations to Mr. Samuel Simpson, B.Sc., M.R.A.S.E., N.D.A., Director of Agriculture, Uganda Protectorate; whose name appears in the New Year's Honour List amongst those on whom the dignity of Knight Bachelor has been conferred.

We extend a very hearty welcome to Mr. D. G. Munro, the General Scientific Officer, U.P.A.S.I., who with his bride arrived at Coimbatore on Wednesday of this week. Correspondence on scientific subjects should henceforth be addressed direct to:—

The General Scientific Officer, U.P.A.S.I.,
Lawley Road P.O., Coimbatore.

Mr. Kunwar Maharaj Singh, C.I.E., I.C.S., the Government of India Colonization Delegate to British Guiana, in the course of an address to the East Indian Association at Georgetown, B. G., on November 11, 1925, made the following remarks:—

'I think it is wonderful, considering your difficulties, how this colony has got on. As regards the Colonization scheme, or rather the scheme for land settlement which it has been my chief business to inquire into. I have consulted Indians of every class and creed in this country. There is not the least doubt that the very great majority of Indians who are able to form

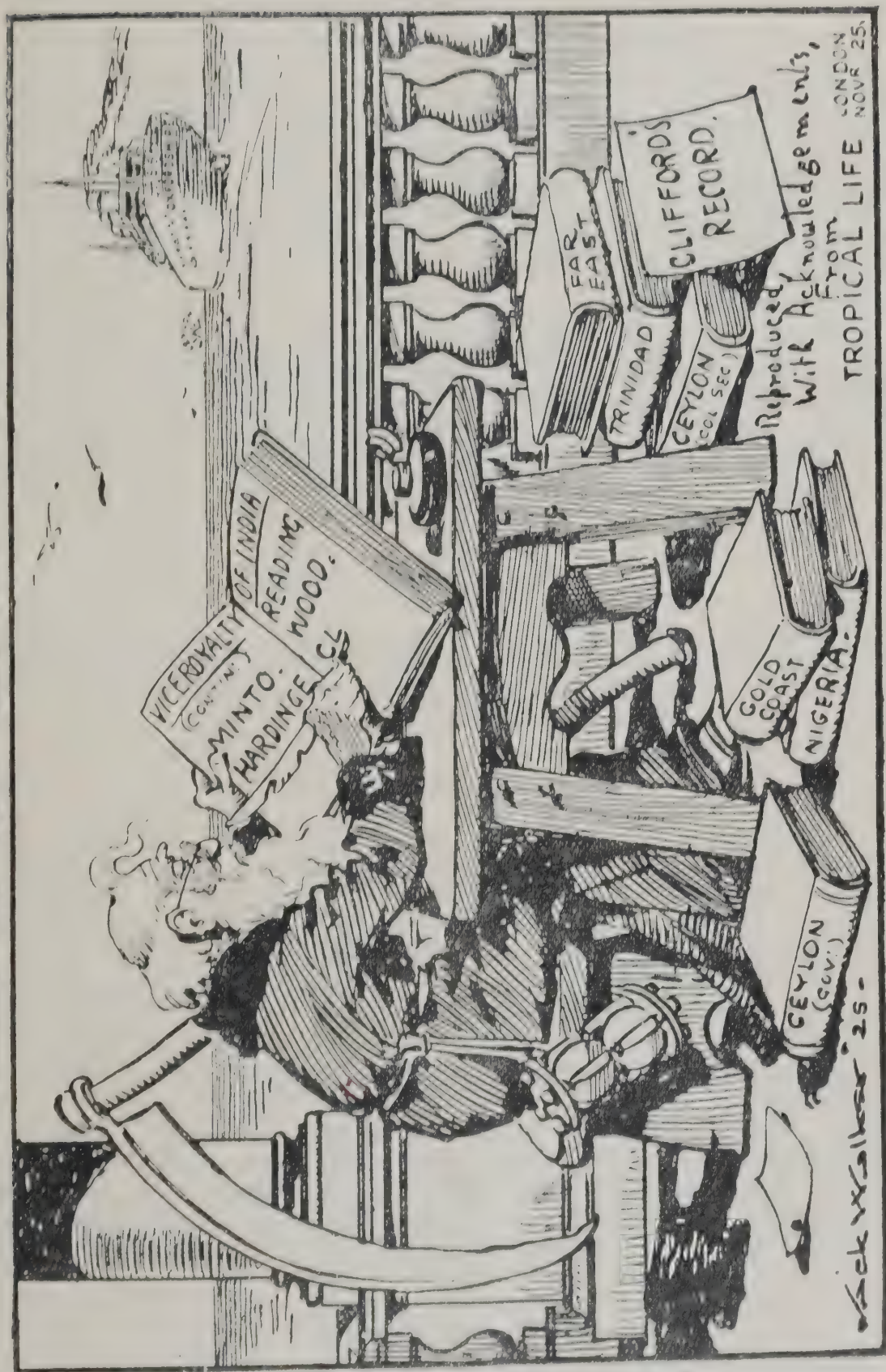
a clear and reasoned opinion think that subject to certain conditions, Indian immigration should be allowed. On the whole, gentlemen, I can say with my intimate knowledge of those parts of India from which the majority of you or your forefathers have come, that considering the classes from which Indians in this colony have been drawn the Indians here have prospered. If they had remained in India they would not have prospered to the same extent owing to the difficulties of caste and the lack of educational facilities and opportunities in respect of certain classes. At the same time I do not think that the prosperity here is so great as I have noticed in some colonies, for example, Mauritius, or Trinidad. In Mauritius, for instance, 40 per cent of the total area under sugarcane is held by Indians in full proprietary rights. Recent statistics which have been supplied to me show that in Trinidad, the Indians in that colony own no less than one hundred thousand acres. At the same time I repeat that, taken as a whole, with many exceptions of course, your forefathers have reached a level of prosperity in this country to which many would not have attained had you and they remained in the Mother Country.'

So far as we know no Colonial Governorship has proved a stepping stone to the Viceregal Gadhi in the past. That one may
Excelsior ? do so in the future however is—*vide* the cartoon which we reproduce on the opposite page—apparently the opinion of at least one responsible organ of that section of the London Press which deals with tropical affairs.

In the penultimate paragraph of last week's Leading Article the
Tilson Tilde 'well over 1/5d. per pound' which we wrote, was inadvertently printed '4/5d. per pound'; and consequently the text as it appeared may have left readers in some doubt as to what we intended to convey. In the third paragraph of our article we had shown that the figure at which America would buy her 1926 rubber was in all probability over 2s./—less than the figure which Mr. Hoover assumed. If this be so, the from his point of view 'excess' profits in 1926 would approximate rather to £33,000,000 than to the £133,000,000 which he had quoted; and it is of course the former rather than the latter figure which Mr. Tilson's supporter imagines will be true not only of 1926 but of the whole period from 1926-84.

The Cochin Port Trust Act (No. VIII of 1925) to provide 'for the
Cochin Port Trust regulation, conservancy and improvement of the port of Cochin' received the assent of His Excellency the Governor of Madras on October 20 and of His Excellency the Governor-General on December 4. The duty of carrying out its provisions is vested in Trustees who must not be less than ten or more than fifteen in number, and may include two representatives each of the Cochin Durbar, the Travancore Durbar, the Cochin Merchants' Association, and the Cochin Chamber of Commerce, and one each of the Cochin Municipal Council and the U.P.A.S.I. Provision is made for the election of the last mentioned representative by postal vote. The Board of Trustees is authorized with the sanction of the local government, or of the Governor-General-in-Council in the case of sums of Rs. 5,00,000 or over, to raise loans in the open market or from the Government of India or the Governments of Madras, Cochin, and Travancore on the Security of the properties vested in the Board or of the monies which it is authorised to collect under the Act.

MILESTONES—WILL THEY LEAD TO DELHI?



H.E. SIR HUGH CLIFFORD, G.C.M.G., &c., LEFT BY THE S.S. 'OXFORDSHIRE', ON NOVEMBER 6TH, TO TAKE UP HIS DUTIES AS GOVERNOR OF CEYLON

COFFEE

Will East Indian thrive Abroad?

Without specifying any particular district, for some claim that it will only be a matter of time before the same trouble 'crops up' over a wide area, can anyone truly say what causes the 'grassy' flavour in African coffee? Furthermore, is it generally known that if this disagreeable flavour is not there at the start the coffee, if kept for some months, seems to develop this unwanted quality as if it was lying there latent all the time? What is the cause? What is the remedy? Can we hope to find the remedy before we know the cause?

It is generally agreed that this grassy flavour is less pronounced, if noticeable at all (if the coffee is consumed within reasonable time after its collection and curing), during the rainy season or when the ground is fairly moist with 'clean' water. During periods of drought, however, when a greater struggle for existence ensues, the flavour causes trouble and buyers shun this and that growth on account of their fear that the berries may develop 'grassiness' later on, even if it is not there at the start.

GRASSY FLAVOUR IN COFFEE

Why speak of it as a 'grassy flavour' was our first question, as it must be with all those who hear of the trouble for the first time. Like 'hamminess' in some African cacaos this flavour must be due to a something in the soil. More careful cultivation, which improves the soil and more careful preparation which improves the beans, some claim, can remove this 'hammy' flavour with cacao, but with coffee they seem to imagine that there is no remedy. Whilst we thought a labour shortage, labour costs, or the defective split in the side of the beans had caused coffee production to be given up in Uganda, we understand from Uganda growers that this is not the cause. The trouble, it seems, is due to the 'grassy' flavour of the berries, which appears to grow worse instead of better, and which—so a long-experienced coffee buyer in London claims—is already suspiciously apparent in another East African kind. If it exists in two growths will it spread elsewhere? The coffee buyer says yes. Then, as if to soften this statement, the buyer discussed the lowering 'in the cup' of coffees generally, particularly those from Santos and Brazil, which were 'miles' better at first, but now the Brazilian, instead of the Indian and Eastern soil, has entered into their being and into that of the original trees' children and grandchildren, so that a setback in the flavour is bound to result and will continue, unless, of course, new seed is introduced. And as it is with Eastern coffee planted in Brazilian soil, this buyer concluded, so it is, only much more so, with coffee brought to, and planted in, Africa.

IS THERE A REMEDY?

One reason suggested is that the plant, struggling for moisture absorbs the jungle miasma and other nastiness from the air. If you deny this you are told, 'In any case the flavour is there and the smell from the smoking coffee when prepared resembles and is quite as unpleasant as the rank smell of unopened jungle and swampy land.' It is useless to argue

with such folk, so you try another, who asks questions and does not offer fixed opinions. 'All seem to agree,' this school urges 'that in times of drought the disagreeable flavour is more pronounced.' Such a flavour, good or bad, must come from the soil through the roots; could it not be, therefore, that the flavour is taken direct from the soil or sub-soil and the very fact that it is less, or not at all apparent, in wet weather, could help to explain the cause as being due to some ingredient, mineral or otherwise, in the soil being in a much more diluted form owing to the increased moisture in the ground, and so able not only to enter into the trees with the more desirable plant foods, through the roots, but to pass out as well with the surplus water transpired through the leaves? On the other hand, for exactly opposite reasons, i.e., lack of moisture, the undesirable ingredient becomes more concentrated but not solid enough to be unabsorbed, so it enters the tree but remains there for lack of water to pass it, in highly diluted form through the leaves, until, still moving about the tree, it finds its way through the flowers to the berries, i.e., plant-food store-cupboard of the germ, intended by Nature to develop into another tree, and there it remains until the berry is roasted and ground, and the results prove neither popular to the would-be consumer nor profitable to the planter.

Here is one explanation. Even if not correct it has been carefully thought out and deserves attention, especially on the part of those who know the cause and solution of the trouble. At the same time this does not seem to account for the tendency of the grassy flavour not always to be apparent at first, so we still want an explanation of the query :—Why does the 'grassy' flavour remain latent in the berries?

THE BERRIES

The London buyer already referred to, spoke of several occasions on which the coffee did not develop the 'grassy' flavour until some time after it had been purchased and stored; then appearing, the coffee had to be taken back and exchanged for East Indian, or other parcels substituted. In one case it was reckoned that a fairly large parcel would last for fifteen or eighteen months, but after the fourth or fifth month a distinct difference in the flavour was noticed and soon after both seller and buyer agreed that the 'grassy' flavour developed and the coffee was changed. This is the story jointed up from several sources from actual producer to actual consumer. All agree on the one point, i.e., the disagreeable 'grassy' flavour. The producer had moved on to cotton and showed less willingness to trouble about the coffee areas, which by now are insignificant. The others (buyers) suggested causes (given) and all agreed to go elsewhere for supplies. But why let them do so? Is there no remedy? We have thought of one or two, for Brazil as well as for Africa, but especially for the latter. We, however, would like to hear what others have to say first. The case could have been stated much more pungently, but there is no need to do so at this stage. All we ask is, if your coffee is said to have developed signs of 'grassy' flavour tell us about your soil, monthly rainfall, etc., and we will see what can be done. Do not make the mistake that this 'tale' is untrue or exaggerated; coffee buyers know all about it and they, after all, are the ones, and the only ones, who really matter.

NITROGEN—ITS IMPORTANCE IN AGRICULTURE

Before the American Railway Development Association, Dr. William S. Myers recently delivered the following address :—

In his first inaugural address Washington said, 'Where agriculture leads all other arts follow.' Most of the annual additions to our national wealth come from farming and our agriculture is still growing. The land is the foundation upon which we build our economic structure.

The world taken as a whole is a great farm and our soils are filled with millions of microscopic animal and vegetable life—vast colonies of living things which act and react upon each other, every square yard is populated with billions of workers and unknown labourers—some helping as soil builders—some helping in the work of unlocking fertility—some, under certain conditions, helping to destroy it.

The average soil is capable of holding more or less one-fifth of its weight in water. The greater the soil population of bacteria bred by proper farming, the greater is its capacity for holding water and soil solutions. Good soils also possess great holding capacity for solids in solution owing to the capacity of soil granules to exercise upon liquids what is known as surface tension. So far as growing crops are concerned a soil without water is as useless as a motor-car without gasoline.

The possibility of utilizing the legumes has been known since the time of the Romans, although they did not know it was nitrogen that was thus captured. The potency of nitrogen in agriculture has been known for years and has been studied especially lately by leading agriculturists.

WIDE DISTRIBUTION OF NITROGEN

The wide distribution of this element in nature is remarkable. Its occurrence is universal. We may fly to the uttermost parts of the earth and it is still with us. Throughout the world it remains substantially in the same proportion to the oxygen of the air, although the atmosphere is supposed to have been once all nitrogen.

Nitrogen is found free not only in the atmosphere but in certain mineral waters and in volcanic gases. It is never absorbed by animals or plants from its elementary state, except through the agency of certain soil bacteria associated with leguminous plants, and when these are located on favourable soils carrying sufficient lime in proper form.

The inactivity of elementary nitrogen is notable. Its compounds, on the other hand, frequently have pronounced and unusual properties, they being the essential components of powerful drugs, of brilliant dye stuffs and of high explosives. In its combined form it is widely and universally distributed in the animal and vegetable kingdoms in albuminoid or proteid bodies, like the casein of milk, or the gluten of wheat. Vast quantities of combined nitrogen occur in Chile in mineral deposits; it is found combined in all arable soils; also in coal. In each of these instances these forms are the product of bacteria or other life. The chemistry and physiology of nitrogen is the chemistry and physiology of living things. Without nitrogen there could be no life as we understand it. It is absolutely essential to all organized life. In view of this it is all the more remarkable how completely inert the element nitrogen is, and how tremendously potent and active are some of its combinations.

MAKING NITROGEN AVAILABLE

The nitration or proper predigestion of plant nourishment cannot occur without some basic substance being present and can only best proceed at favourable summer temperatures. At these temperatures, when sufficient moisture is present, this action proceeds normally and thus prepares unavailable forms of nitrogen for assimilation by growing crops. It cannot proceed when it is too cold or too wet. In other words it is the process of nitration of the non-nitrate forms of nitrogen chiefly into the nitrate form that makes them available for plant growth.

The vegetable world stores and elaborates available nitrogen into forms suitable for animals, including man, to feed upon, and the living processes of animals in turn utilize these forms of nitrogen for their growth. Without nitrogen there can be no growth, either vegetable or animal. The key to successful cattle feeding, as is well known, lies wholly in adjusting rations to the gluten carriers. Nature is always prodigal and these processes, while subject to natural law, permit waste from the economic standpoint. Nothing from the physical standpoint, however, is actually lost. Matter merely changes its location.

Nitrogen returns to the atmosphere as generally and continuously as water gravitates to the ocean and remains there accessible to those natural agencies, capable of transforming it from its completely inert form into intensely active forms immediately useful to man. On arable lands under average conditions more nitrogen goes back to the air than is received from the atmosphere and especially when the lands are much exposed to severe wind and weathering.

(To be concluded next week).

TEA WITHERING

AND

TYPICAL FANS

A well-known authority, says *Tropical Life*, has recently stated that withering the leaves is probably the most important of all the various stages of tea culture and manufacture. There seems to be firm ground for such a remark because, no matter what efforts are made to secure a good leaf, all the care taken in cultivating, plucking and the subsequent manufacture of the tea may be—some claim must be—unavailing if the wither is faulty.

In the first place, it is obvious that the leaf must be so prepared by proper withering that it is ready for rolling. That is to say, it must be dry enough not to be torn by the roller, and yet not so dry as to be crushed. But more important considerations which concern both the flavour and strength of the tea are that these qualities depend very largely upon certain natural processes which take place during withering, and particularly must it be noted that the time taken by nature to do this work is practically a fixed one. This same unit of time necessarily controls also the first condition, viz., that the leaf must not only be properly withered, but that the operation must take a definite length of time, so that the two processes, the mechanical evaporation and the chemical changes, may coincide. Another point to be carefully remembered is that if the withering is delayed by unsuitable weather putrefaction takes place, a result which is inevitably detrimental to the whole wither and cannot afterwards be rectified. If the above statements be accepted and climatic

variations are taken into consideration, it is obvious that withering by natural means must not only be unreliable for the production of good quality teas, but must also be uneconomic because the cost of the necessary plant to control the wither is comparatively small as compared with the better results obtained.

Moreover, when mechanical means are employed for controlling the movement of the air a very much greater quantity of leaf may be withered in the same loft, because instead of spacing the trays about 7 or 8 inches apart, little more than half that space is needed if the air current is controlled by fans. Such a saving of space, together with time saved in bad weather, practically doubles the output of the lofts.

The application of fan power is a simple one. The main factors are to choose the best, i. e., the most suitable and efficient fans, and allow the suppliers to suggest the best method for their application, seeing that the surrounding conditions differ. For instance, whether lofts are above the factory or separate, whether they are side by side or above one another, whether the heat from the dryers can be utilized, or must steam-heating elements be provided.

It may be here mentioned that in all cases it is advisable that the outlets for the moist air shall be free, and therefore it is better that they should not be on the windward side of the building. For night withering it is good practice to use steam-heated elements to temper the air, especially as these can be simply controlled and cost little.

A blow through the loft by means of the fans before the leaf is spread is undoubtedly advantageous, and it is good practice, after withering by artificial heat, to continue to run the fans for a short time with the heat off, for the purpose of cooling the leaf.

Coming now to the type of fan most suitable, this is a problem the solution of which is governed by the circumstances alluded to above. The course adopted thirty years ago, and still pursued by many, is to install Blackman box-bladed fans placed in the end walls of the lofts and exhausting into the open air; the fans being arranged, when possible, on the leeward side of the building, so that the prevailing winds do not blow against their outlets. Very many thousands of these Blackman fans are still so employed.

If the method just indicated is adopted, but the fans, owing to local conditions, must be allowed to discharge against the wind, the Keith open-type wheel—modified to suit the tea-withering conditions—is preferable, because these fans discharge centrifugally and therefore are not influenced by wind beating against them.

Probably in the majority of cases it is possible to avoid having the fans in the outer wall, but to arrange them so as to circulate through the lofts, thus economizing in the power needed and also making better use of the heat, whether waste heat from the dryers or steam heat from the radiators. If, for instance, a fan is so placed that it is able to discharge the whole or part of its air either into the open or into another loft, or circulate it in whole or in part through one of a pair of lofts, complete control and economy are secured. For this purpose the Blackman streamline fan is to be recommended, not only because it is the most efficient volume fan, but also because it is reversible and its smooth streamline surfaces do not permit of the collection of dust.

U.P.A.S.I. SPORTS CLUB

Planters' Week 1926

Competitions

DISTRICT REPRESENTATIVES are requested when sending in their entries, to make same complete for all or any of the competitions listed below, in which their members wish to compete.

They are also reminded that the Committee would wish to be informed of the number of children who will be accompanying their parents to Ooty, and who will be attending the 'Children's Fancy Dress Tea and Dance.'

GOLF—Inter District Competition (pairs).

'Pinches' Cup—Men's singles.

'Windle' Cup—Ladies' singles.

TENNIS—Inter District Competition (pairs or three).

'Harper' Cup—Men's singles.

'Murphy' Cup—Ladies' singles.

'Veteran's' Cup—presented by Mr. J. A. Richardson (conditions for which to be published later).

CRICKET—Any members who wish to play.

CHILDREN'S FANCY DRESS—Any children who will be attending.

Entries for golf and tennis will close at 3 p.m. on February 19, 1926.

MEMBERS are again reminded that all entries for all Competitions during the Week must be sent in through District Representatives of the Club. This is not being done in some cases, and it will be impossible for District Representatives to know the number of admission tickets to be applied for.

Rugby Football 'Carver' Cup

Three districts have entered and the Tournament, as last year, will be played during Planters' Week in February at Wellington instead of at Ootacamund, as the elevation of Ooty was found too high last year for this game.

The districts entered to date are :—

The Holders—ANAMALAIS.

KANAN DEVANS.

WYNAAD.

It is hoped that 'Southern Districts' may be able to raise a team.

The dates of play will be February 20th and 22nd evenings.

The draw will be notified well beforehand in order to save the team that draws a bye from arriving before the 22nd.

Entries close on January 25.

January 3, 1926.

G. W. FULCHER,
Honorary Secretary.

SHEVAROY PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Extraordinary General Meeting held at the Victoria Rooms,
Vernam, on Thursday, December 10.

Members present

Mrs. F. Short, Messrs. P. J. Watts, C. D. Kyle, C. E. Hight, N. M. Hight, L. E. T. Short, A. R. D'Souza, C. Rahm, V. L. Travers, Douglas, W. I. A. Leckler, J. Singaram, S. Singaram, B. A. R. Krishnaswamy Chettiar, and Mr. W. A. Rahm (*Honorary Secretary*).

Visitor

Mr. F. Ryle.

In the absence of the Chairman, Mr. P. J. Watts was elected to the Chair.

1. Notice calling the Meeting was read.
2. Read and confirmed Proceedings of the E. G. M. dated October 11.
3. *Standing Labour Committee*.—The recommendations of the Standing Labour Committee were discussed in Committee.
4. *Introduction of Telephones*.—Read letter from the District Engineer, Post and Telegraphs, re the introduction of Telephones on the Shevaroy Hills.

Resolved that the Honorary Secretary should obtain further particulars on the subject.

5. *Passages to Wives of European Employees of the Labour Department*.—Read letter from Director, Labour Department.

Resolved that this Association is not in favour of granting passages.

And with a vote of thanks to the Chair the meeting terminated. *Carried*

W. A. RAHM,

Honorary Secretary.

P. J. WATTS,

Chairman.

DISTRICT NOTES

A. North Coorg

GOLF AT SOMWARPETT

The Coorg Golf Competitions, Semi-finals and Finals of the Championship and Handicap were played off on the Bellin Club Course, Somwarpet, on December 12, 13 and 14.

The early commencement of crop picking, the wet weather, and other various causes made many would-be Competitors scratch their matches. Fortunately however for the duration of the meeting the weather though dull and threatening, kept fine, and the meeting though not so well attended as last year, was none the less most enjoyable.

The Course and the greens were in splendid order, and have seldom been better, and reflected great credit on those concerned.

The Semi-finals of the Championship played on the 12th, were between R. Bentley and D. C. Mahon; and J. L. Harrison, last year's winner of the Championship, and A. F. Magniac.

The eventual winners proved to be Messrs. Bentley and Harrison.

The Final between these two players took place on the 13th, and resulted in an easy win for R. Bentley by 8 up and 7 to play.

The Handicap Semi-final between Messrs. Sprott and Nicolls, resulted after a good game in a win for the latter, and the Final between Messrs. Nicolls and Pearse, after a very keen game resulted in a win for G. R. Pearse, which proved very popular.

The Final of the Mixed Foursomes between J. L. Harrison and Mrs. Elsee, and J. S. Morgan and Mrs. Magniac, for a handsome cup presented by Mr. Maclean still remains to be played off.

Several members entered for a Flag Competition, on the morning of the 14th, the eventual winner being J. H. Sprott, who finished on the 1st green.

At the conclusion of the meeting, Mrs. Pearse presented the prizes amidst applause, and Mr. Sprott, the Golf Secretary, was cordially thanked by those present for his hard work in getting the Competitions through, a by no means easy task.

December 29, 1925. A. F. M.

B. South Coorg

XMAS DAY, 1925.

There was a Church service at the Pollibetta Church in the morning, forty-two attending. Mr. W. A. F. Bracken (Church Warden) took the service. The Church was tastefully decorated. Mrs. Bracken was at the organ.

In the afternoon there was tennis at the Club, and in the evening the usual Bungalow Xmas parties. The weather kept fine, the mornings and evenings being quite chilly.

NEW YEAR'S EVE

There was a Dance and Supper at the Club. The Club was very tastefully decorated. Forty-five attended. Fancy dress was optional. The following ladies were in fancy dress:—Mrs. Scholfield 'Gipsy', Mrs. R. Wright 'Pierrette', Miss Mann 'Superstition', Miss Nunn 'Jenny Driver' (from the Beggar's Opera), Mrs. Reid 'Milkmaid', Mrs. Irwin 'Tutankamen'. The following gentlemen:—Mr. Harper 'Johnny Walker', Mr. Tew 'Farmer's Lad', Mr. Murphy 'Departed Spirits', Mr. Scotland 'Indian Nobleman', Mr. Bentley 'Chef', Mr. Roberts 'Country Peasant', Master Bucknall 'Jester', Mr. Reid 'Nigger Minstrel', Mr. Irwin 'Elderly Lady', Mr. J. Elliott 'Footballer'.

The following were in evening dress :—Mr. and Mrs. Harrison, Mrs. Harper, Mrs. and Miss Templer Parsons, Mr. and Mrs. Pitcairn, Mr. P. G. Tipping, Mr. F. Macrae, Mr. Maclean, Mr. and Mrs. Duncan, Mr. J. D. Duncan, Mrs. and Miss Gerrard, Mr. Owen, Mr. Davis, Mr. F. W. Richardson, Mr. Scholfield, Mr. and Miss R. Wright, Mr. and Mrs. W. A. F. Bracken, Col. and Mrs. Bucknall, Mr. Cunningham, Capt. Morris, and Mr. Wynyard-Wright.

A most enjoyable evening was spent, and the New Year was brought in, in the good old fashioned style. Mr. Macrae made a very neat little speech, and proposed the thanks of all, to the Honorary Secretary (Mr. Scholfield) and his helpers for making the evening such a success. It was in the wee small hours of the morning that the last of the members left.

A large number assembled again in the afternoon for tennis, bridge, and dancing on New Year's afternoon.

C. South Travancore

KALTHURITY VALLEY

Having sharpened my pencil a number of times, extracted a beetle's leg from my fountain pen, and breathed a bowlderised malediction on the head of whoever suggested that Secretaries of Associations should send in District Notes ; I sit down, as diffident as a timid lover penning his devoirs or a schoolboy writing home for another supply of doughnuts, to weave together a few words and phrases into a jazz pattern of something tangible. If there was nothing to say I would say there was nothing to say, make a few remarks about the weather and then, my duty done, retire to bed ; but unfortunately I am not so fortunate.

The river of routine in this sunny valley has lately been disturbed by many social eddies. A generous donor presented a fine silver rose bowl for Handicap Ladies' Singles, an event which caused much fluttering in the dovecots. I will not attempt to describe the discussions that went on amongst the ladies as to whether a lob or a booby-dazzler was the best shot to retrieve a difficult position, or the speculations as to whether the bowl would eventually find a resting place on the William and Mary tea-poy ; the Georgian side board, or the polished surface of the Brinsmead. The competition which took place at Kalthuritty Valley Club on November 28 and 29 was followed with much interest. The pen is a clumsy instrument to depict the grace and agility of the competitors or the skill of the players, for mere man must needs tread warily on such occasions lest he pull a beehive about his ears and be given the cold pancake at the next Thé Dansant. Six ladies took part—Mrs. Millar eventually running out the winner of the Edward Lord Bowl after a closely contested game with Mrs. Branson. A men's doubles tournament was run on the 29th, Messrs. Lodge and Hoare proving the victors in a strenuous final against Messrs. Gillespie and Bowling. Mr. John Calderwood, of Messrs. Harrisons and Crosfield, Ltd., London, in a appropriate speech, congratulated the winners and kindly offered to present the prizes for our next mixed doubles tournament.

On the afternoon of December 5 the motor road from Nagamally Tea Factory to the Manager's bungalow, which has been creeping up the face of the steep hillside as slow and sure as the smouldering trail of a forest fire, was opened by Mr. A. H. L. White. At 3 o'clock the line of cars and motor cycles circled the tea factory and passing through the triumphal arch started the ascent, to the hoot of the factory engine, banging of crackers, cheers of the labour force and smiles of the writers' children, dressed in their best Sunday suits. We thought we were doing well until the leader, a little uncertain of the first zig, faltered at the corner; the procession slowed down and stopped just as a belated passenger, panting up the hill, took a flying leap into the nearest motor car only to find that the door was not on speaking terms with the hinges. However difficulties arise only to be overcome. The first car mastered the hairpin bend; the water ceased singing in the radiator, an engine which had stopped started, while the errant door was recovered from amongst the tea bushes and the caravan swept on, leaving on the virgin surface of the road as many lines and crosses as are to be found on the countenance of a spinster of uncertain age. Arrived at last at the bungalow 'where every prospect pleases' and with the pleasant feeling of satisfaction of having passed another milestone in the history of Nagamally, the guests sat down to a sumptuous tea presided over by Mrs. White. Tennis and dancing completed a memorable afternoon.

I must now relate of a journey, as remarkable in its way as any ever entered into by Columbus or Vasco da Gama, which was undertaken by a number of adventurous souls from the Valley, who in the mist and rain of a December morning, undismayed by seas of mud and numberless pot holes ploughed their miry way by motor to the far off hills of Mundakayam. To set off as we did to a region unknown to many of us, without maps and trusting to that divine providence which shapes our ends, past rapacious toll keepers and acrobatic cows, not placidly chewing the cud, but giving chase to anything on four wheels, past somnolent bandy wallahs and pariah dogs who, not to be outdone in the frenzied speculation for rubber, must need bite the tyres. And then the further obstructions and difficulties of the roads: the deaf mutes, old women with baskets, performing goats, pigs which disappear under the front axle to appear as cold pork; buffaloes whose snorts strike terror into the heart of the most experienced travellers; the droves of ducks marching in serried ranks; the eight seater Fords whirling round corners on two wheels and the monstrous lorries bearing down upon one like battleships cleared for action is to draw an inadequate picture of the joys of motoring in this country. The following made the journey: Mr. and Mrs. Jackson, Mr. and Mrs. Lodge, Mr and Mrs. Millar, Messrs. Gillespie, James and Champion. We were met by our kind hosts and, revived by 'nature's sweet restorer', were in good fettle on the morrow to enjoy a day at the Mundakayam Club. The Valley were fortunate in winning the tennis match by 3 events to 1. Lunch and tea followed by a highly successful dinner and fancy dress dance completed a pleasant visit. Our thanks are due to all those in Mundakayam who worked so hard to make this, the first inter-district meet, such a thoroughly enjoyable one.

Our next inter-district meet, which took place on December 19 and 20 was that against Quilon. Unfortunately, owing to the near approach of Xmas, many of our Quilon friends could not make the trip, but we were pleased to see Messrs. Lampard, Jacob, Feltham, Newman,

Wilson and Read. Feltham had a rare good match with Lodge the former winning 6-4; 8-4; while Feltham and Jacob were too good for Lodge and Millar in the doubles winning 7-5; 6-4; our second string however, represented by J. G. Glen in the singles and J. G. Glen and Cowdrey in the doubles, gave a good account of themselves. A doubles tournament took place on the 20th in which Mr. and Mrs. Lodge proved the winners against Mr. Feltham and Mrs. Branson after a good game the score being 6-4; 6-4.

Perhaps these notes, having dealt so largely with matters social, will not be considered complete unless there is a dissertation on Black Spot in tea, hubble bubbles in smoked sheet; the best method of catching mosquitoes in cowbyres, or a thesis on watering the garden; but I feel that the reader has already had more than enough and that I should follow the example of the gentleman who, on being asked by a lady to point a moral and adorn a tale in her Confession Album, wrote across the page 'No time to write; soup is on the table!'

LETTER TO THE EDITOR

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

Mr. Newcome appears to be satisfied that because Coorg says 6 annas per mile is a fair and liberal allowance, it must be so; but this is an argument which does not appeal forcibly to the majority, and, I imagine, appeals even less to the Superintendents of the Labour Department.

Will Mr. Newcome work out and publish the cost of running a car under the following headings, which are taken from the 'Motor' of November 10, calculating them for an average car (i.e. not the cheapest nor a luxury car) making fair allowance for the fact that Labour Department cars have to travel on what are probably the worst roads in the country?

The headings are:—

- | | |
|---|--------------------|
| 1. Interest on capital, presuming the Department does not supply the capital. | 5. Petrol and oil. |
| 2. Depreciation. | 6. Adjustments. |
| 3. Insurance. | 7. Replacements. |
| 4. Tyres. | 8. Repairs. |
| | 9. Wages. |

Yours faithfully,

'A. C.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending January 2nd, 1926

Bank Selling Demand Draft on London

28th	29th	30th	31st	1st	2nd
Holiday.	18 5/32d.	Holiday.	Holiday.	Holiday.	18 5/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending December 12, 1925	January 1 to December 12, 1925	January 1 to December 12, 1924
TEA (WEEK ENDING DECEMBER 12, 1925)		s. d.		s. d.	s. d.	s. d.
(a) <i>Anamallais</i> —			N. India.	1 8·25	1 5·60	1 7·85
Sholayar ...	183	1 8 $\frac{3}{4}$	S. India	**1 9·03	††1 5·53	††1 6·95
Naduarr ...	66	1 8 $\frac{1}{2}$	Ceylon...	1 10·72	1 8·05	1 8·71
(b) <i>Central Travancore</i>			Java ...	1 5·11	1 0·81	1 3·41
Haileyburia ...	25	1 9 $\frac{3}{4}$	Sumatra.	1 5·82	1 4·43	1 5·90
Karintharuvi ...	25	1 6 $\frac{1}{4}$	Nyassa-land.	Nil	1 1·23	1 4·57
(c) <i>Kanan Devans</i> —			Total ...	*1 8·70	†1 5·98	†1 7·73
Periavurrai ...	93	1 11				
Letchmi ...	128	1 10 $\frac{3}{4}$				
Vagavurrai ...	80	1 10 $\frac{3}{4}$				
Munnar ...	184	1 10				
Sevenmalai ...	164	1 9 $\frac{3}{4}$				
(d) <i>Mundakayam</i> —						
Yendayar ...	111	1 7 $\frac{3}{4}$				
(e) <i>Nilgiris</i> —						
Brooklands ...	40	*1 10 $\frac{3}{4}$				
Mailoor ...	83	1 9				
Sutton ...	40	1 8 $\frac{1}{2}$				
Woodlands ...	167	1 8 $\frac{1}{4}$				
(f) <i>Nilgiri-Wynaad</i> —						
Daverashola ...	138	1 9 $\frac{3}{4}$				
Woodbriar ...	96	1 8 $\frac{1}{2}$				
(g) <i>South Travancore</i> —						
Merchiston ...	33	1 7				
(h) <i>Wynaad</i> —						
Chulika ...	86	1 6 $\frac{3}{4}$				

(b) SPECIAL COFFEE CABLE

LONDON, JANUARY 6, 1926

'A' COFFEE

140s. PER CWT.

MARKET QUIET

** Based on 1,912 packages.

†† „ „ 175,425 „

†† „ „ 129,609 „

* Based on 68,353 packages.

† „ „ 3,064,960 „

† „ „ 2,855,710 „

(c) *Précis of reports on the London Markets received on January 4, and covering the week ending Wednesday, December 16 :—*

(1) *Tea.*—There was a very strong demand for all grades of Indian; and Southern Indians were keenly bid for at prices which showed an advance of from $\frac{1}{2}d.$ to $\frac{3}{4}d.$ per pound on those realised during the previous week.

(2) *Rubber.*—Stocks underwent an increase of 625 tons from 3,831 to 4,456. The week under review also saw rubber fall from $55\frac{1}{2}d.$ to $47\frac{1}{2}d.$

(3) *Coffee.*—Private transactions in East Indians continued at satisfactory prices, though none was offered at the Auction Sales. The demand for Kenyans to which we referred last week strengthened, and a large quantity was sold at very remunerative rates. Tanganiyakas too were active, and the Home trade would appear ready to pay satisfactory prices for good descriptions from whatever source. The prospect for East Indians therefore probably depends entirely on the quality forthcoming: if that is good, prices will correspond: if it is inferior, prices will fall to a point quite possibly below that at which any profit can be made.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, January 2, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	0.26	91.38	91.64	19. Coonoor ...	2.12	70.51	72.63
2. *Tenmalai.	0.35	98.83	99.18	20. Kotagiri ...	N.R.	57.88	N.R.
3. Mundakayam.	0.00	150.94	150.94	21. Ootacamund	0.35	48.81	49.16
4. *Peermade.	0.00	171.00	171.00	22. Yercaud ...	0.77	50.48	51.25
5. Twyford ...	0.00	N.R.	N.R.	23. Devala ...	0.38	N.R.	N.R.
6. V'periyar ...	0.01	N.R.	N.R.	24. Gudalur ...	0.00	73.35	73.35
7. Kalaar ...	0.15	210.37	210.52	25. CALICUT ...	0.00	134.37	134.37
8. Chittuvurrai	2.42	56.02	58.44	26. Kuttiyadi ...	0.00	178.34	178.34
9. BODI'KANUR	N.R.	25.27	N.R.	27. Vayittiri ...	N.R.	N.R.	N.R.
10. COCHIN ...	0.13	109.18	109.31	28. Manantoddi.	0.00	110.83	110.83
11. *Mooply ...	0.00	113.15	113.15	29. Billigiris ...	1.17	62.21	63.38
12. Mooply Valley	0.00	124.95	124.95	30. *Sidapur ...	0.00	74.44	74.44
13. Pachaimalai	0.08	122.86	122.94	31. Pollibetta ...	0.00	85.58	85.58
14. Mudis ...	0.29	201.31	201.60	32. Somwarpett	N.R.	84.22	N.R.
15. POLLACHIE.	0.11	29.91	30.02	33. Ballupete ...	N.R.	75.86	N.R.
16. Manjeri ...	0.00	125.76	125.76	34. MANGALORE.	1.06	138.33	139.39
17. Nilambur ...	N.R.	N.R.	N.R.	35. MADRAS ...	0.74	61.50	62.24
18. Naduvattam	0.00	83.11	83.11				

W = During the week.

P = Previously.

N.R. = No return.

* = U.P.A.S.I. Ex. Station.

[N.B.—Will the Superintendents who have made themselves responsible for the Twyford, Vandiperiyar, Somwarpett, and Ballupete returns kindly bring their figures up-to-date this week? *Ed.*]

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : **UPASI, Madras**

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 3] SAT., JANUARY 16, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	33	Letters to Editor—	
Agriculture in Ceylon ...	35	Coffee Drying Machinery ...	43
Eothen's Market Notes ...	36	Indigenous Manure ...	44
Nitrogen—Its Importance in		U.P.A.S.I. Sports Club ...	45
Agriculture ...	39	Commercial and Meteorolo-	
Rubber Supply and Demand ...	41	gical ...	47

EDITORIAL NOTES

Obituary We much regret to learn that Mr. W. V. McMurtrie, the well known and popular Manager of Hereford Estate, Shencottah, met with a most untimely death through a regrettable accident last week. It appears that the deceased was superintending some felling operations; and that one of the trees which had been uprooted dislodged as it fell another tree which struck Mr. McMurtrie down. Not merely Travancore but the whole of South India will lament the loss of a most efficient Planter, regarded by those competent to judge as one of the Planting Industry's coming men.

F.M.S. Planters' Provident Fund The rules for a General Provident Fund for F.M.S. Planters; which we published in our issues of November 28, 1925, December 26, 1925, and January 2, 1926 as having been drawn up by a committee of the Incorporated Society of Planters', Malaya, and approved by the Rubber Growers' Association, London; were formally embodied in a Private Bill and introduced in the Federal Council by the Hon. Mr. Kindersley on December 15, 1925. Two small amendments were made in Committee on the second reading of the Bill, which will have the effect of extending membership of the Fund to those whose monthly salaries are not less than \$200 (c.f. page 947 Rule II Issue December 26. Ed.), and of making all service count for benefits whether it be continuous or not (c.f. page 12 Rule 20 Issue January 2. Ed.). The Bill was then reported to the Council, and passed into law as enactment No. 25 of 1925; the Chief Secretary stating that

Government heartily sympathised with the members of the Planting Industry in respect of the Bill.

The first pucca auction of the Mangalore season took place on the 7th and resulted in a considerable volume of business, at prices unexpectedly high in view of the slackness in the market at the beginning of the week. The 'spot' figure was Rs. 80 to Rs. 85-8-0 per cwt. Cured ex bags; while forward business for January-February and January-March was done respectively at Rs. 82 and Rs. 84: the latter figure being equivalent to about 137s. 6d. c.i.f., or 143s. gross landed, London terms. The business done however does not warrant undue optimism; since much of it is due to the 'cover' required by 'bears' who had made forward sales.

Messrs. Peirce, Leslie & Co., Ltd., Mangalore, asks us to state that they are willing to accept Rs. 1,200—with free delivery on any estate in Mysore or Coorg—for the 1924 model Touring Car (recently overhauled; in good running order; fitted with bulb horn and khaki cushion covers; but without self-starter) which was used by their upcountry Assistant last season in Coorg and Mysore.

Our latest information is that already forty-three representatives of the Firestone Tyre and Rubber Co., are actually in Liberia pushing forward the rubber project which its promoters hope will within the next ten years be supplying some 30 per cent. of the world's total needs. The Company appear to have acquired no less than one million acres from the Liberian Government, and to be contemplating the planting up of 50,000 acres each half year through the agency of 25,000 men and at a cost of \$5,000,000. To afford scope for further expansion the Company has acquired 35,000 acres in Tobacco on the Isthmus of Tehuantepec in Mexico, and is negotiating with regard to gigantic plots in the Amazon region of South America where there are millions of acres of undeveloped rubber lands. The company is also interesting itself financially in a plan of Mr. H. N. Whitford of the Rubber Growers' Association of America, which would make \$15,000,000 a year available for the exploitation of rubber plantations in the Philliphines.

We imagine most people would say off hand that the first of the subjoined two extracts came from the American, and the second from the English, Press. They would however be wrong; for the first is taken from *The Manchester Guardian* and the second from *The New York Times*.

The first reads:—

'The British Government, the Colonial Governments, and the Plantation Companies have all worked together in a narrow grasping spirit to seize the maximum profits which can be squeezed out of a few years, to the permanent injury of the industry and the immediate injury of all users of rubber.'

And the second runs:—

'Britain can hardly be called upon to surrender out of hand an advantage, which her far-sighted statesmen and Empire-builders have long been preparing for her. What would be the feelings of Americans if England were to ask them to reduce the price of cotton, oil, copper and wheat, which she is compelled to buy from America?'

AGRICULTURE IN CEYLON DURING 1924

TEA

According to the Director of Agriculture's, Mr. F. A. Stockdale's report, 1924 was a very prosperous year from the Ceylon Tea Planters' point of view. 204,930,307 lbs. of tea valued at Rs. 204,930,307 (or at an average of Re. 1 per pound) were exported, as against 181,939,731 lbs. valued at Rs. 185,686,387 during 1923.

Shot-hole borer proved satisfactorily amenable to liberal manuring ; but even fumigation did not hold Tea termites in check, and 'Tea tortrix', 'Nettle-grub', and 'Witches' Broom' also wrought a certain amount of harm. Search was continued for a suitable paint mixture which would protect the bushes from attack by the scavenging termites between prunings ; 'Tea tortrix' was dealt with by the systematic collection of eggmasses ; and research on 'Witches' Broom' indicated that the disease is due to physiological causes connected with the physical or chemical composition of the soil.

The question of soil erosion is now recognized as of outstanding importance, and the remediative measures recommended comprise improved drainage systems, contour hedges, and leguminous cover crops.

Gliricidia gave very encouraging results as a shade tree for Tea, and the experimental plot of half an acre yielded on lopping 20,400 lbs. of green mulch.

RUBBER

The exports of rubber from Ceylon under the Restriction Scheme during 1924 were 37,036 tons valued at Rs. 63,749,711. In the last two months of the year 26,545 gallons of Fluid rubber latex were exported as against negligible quantities during the first ten months of the year. The acreage under rubber at the end of 1924 was 461,025.

'Pod rot' and 'Leaf fall' were the most prevalent forms of disease.

The manuring of poor, washed, lateritic soil is held to be necessary if average yields and vigorous growth are to be maintained ; although the application of manure to the more fertile experimental plots gave no increase of yield.

Roselle fibre is suggested as a Catch-crop for young rubber on estates where the rainfall is large. Amongst the creeping and trailing plants : *Vigna oligosperma*, *Indigofera endecaphylla*, *Centrocema pubescens*, and *Desmodium triflorum* and amongst the shrubby plants : *Tephrosia vogelli*, *Clitoria cajanifolia*, *Crotolaria usaoamoensis*, and *Crotolaria anagyroides* ; are recommended for use as leguminous cover crops.

CARDAMOMS

The exports in 1924 were 2,667 cwt. as against 4,096 cwt. in 1922, and no future increase in the figure is anticipated ; as the tendency is to replace cardamoms with tea.

MANURES

The Agricultural Chemist reported as follows on a new manure of the American Cyanamide Company called 'Ammono Phos' :—'A new manure "Ammono Phos" has been put on the market by the American Cyanamide Company. The manure is prepared by obtaining ammonia from cyanamide (originally) from the air, and absorbing it in phosphoric acid made from superphosphate. Consignments have been sent here for manurial trial. There are several grades : (1) 12 per cent. (NH₃) ammonia, 40-48 per cent. phosphoric acid ; (2) 20 per cent. (NH₃) ammonia, 16-18 per cent. phosphoric acid. The latter are inclined to be hygroscopic which may be a deterrent against its use here.'

MONTHLY MARKET NOTES

BY

'EOTHEN'

TEA

It is becoming generally realized that the tea statistical position which, earlier in the year threatened to get entirely out of hand, is rapidly improving. The November outturn of tea from Northern India was over 11 million lbs. less than for the same month of 1924. At one time it seemed likely that there would be a large over-production for this season, but this menace has now been dispelled. Furthermore, recent shipments of tea from Ceylon are on a smaller scale than they were last year. Weather conditions have assisted the efforts of tea companies which were anxious not to over-produce.

The stocks of tea in bond in this country, which three months ago showed an increase over last year on the same date of 40 million lbs. are now only 17 million lbs. more than at November 30, 1924, when they stood at approximately 172 million lbs. The stock at November 30, 1925, was 189 million lbs. Tea imports for the eleven months were 12 million lbs. less than for the corresponding period in 1924. The decline of 11 million lbs. in the imports of China teas, however, accounted for the greater portion of this decrease.

The weekly auctions have passed off well, and prices have improved, as will be seen from the following averages:—

	Week Ended Dec. 11, 1925	Current week, 1924	Jan. 1 to date, 1925	Jan. 1 to date, 1924
Northern India ...	1/8·25d.	1/10·62d.	1/5·60d.	1/7·85d.
Southern India ...	1/9·03d.	1/10·32d.	1/5·53d.	1/6·95d.
Ceylon ...	1/10·72d.	1/11·85d.	1/8·05d.	1/8·71d.
Java ...	1/5·11d.	1/7·48d.	1/0·81d.	1/3·41d.

Strong liquoring teas have been in particularly good request. Quality is falling off and this has affected prices of medium grades. Tippy tea is becoming scarce, nevertheless at Monday's auction prices of the plainer parcels rather tended in buyers' favour. Southern Indian teas have met with good support, especially at last week's sales. The last sales before Christmas are showing a continued active demand for all lower to good medium grades.

The consumption of tea in America does not increase to the extent that had been anticipated, despite the efforts made by the Indian Tea Association, whose propaganda work has cost a good deal of money. Notwithstanding the high price of coffee the United States fails to take kindly to tea; and the consumption last year was only ·93 lbs. per head of the population. In Great Britain and Ireland the *per capita* consumption of tea is now 8·76 lbs.

Prices of tea shares have improved, the discriminating investor realizing that, with rubber shares monopolizing attention, the opportunity should be seized to acquire holdings in sound tea companies at the present time. The rubber boom cannot last indefinitely, and when the selling begins, exchanges from rubber to tea shares will be popular.

It is true that interim dividends have been somewhat severely cut; but the investor in tea shares, having regard to the improved prices which have been obtained for the commodity at the auctions during the past quarter, and which show every likelihood of being maintained in the New Year, is looking for final dividends on a scale which will compare favourably with the distributions made for 1924-25. Another point is that most tea companies took the opportunity of utilizing the excellent profits made during the past financial year to strengthen their reserves, and it is therefore deemed unlikely that much further strengthening will be considered necessary when their next balance sheets are prepared.

For those who like to play for safety, the many excellent tea-cum-rubber shares have been deservedly popular.

RUBBER

Mr. Henry Hoover, the United States Secretary for Commerce, once more occupies the centre of the rubber stage. His letter written this week to a Senator is really nothing more than an amplification of a previous pronouncement which he made a few weeks ago attacking what he termed the British rubber monopoly. He claims that owing to the artificial restriction of production brought about by the Stevenson restriction scheme America will have to pay the equivalent of about £200,000,000 for her rubber supply next year instead of about £65,000,000 which the originally proposed Stevenson 'fair price' of 1/6d per lb. led her to understand would be the case.

He suggests that America should take defensive measures, which include withdrawal of credits by banks, a voluntary 'save rubber' campaign, the encouragement of the manufacture and use of reclaimed rubber, the stimulation of production in countries other than those which are now restricting output, and lastly the setting up of machinery to prevent rubber buyers from bidding against each other. As a direct result of his letter, it is announced that a resolution is to be introduced asking Congress to combat the 'British rubber monopoly' and the Brazilian coffee combine.

It is difficult to see how America can affect the normal course of the rubber market during the next few months. Owing to her deliberate abstention from buying in the first half of 1924 when as a result the price of rubber was forced down to 9½d. per lb. a shortage of spot rubber has forced the price up again to over 4 per lb. and stocks are still dangerously low. America's 'Save Rubber' campaign will undoubtedly affect consumption in time, and so will the use of reclaimed. But for the next few months the shortage of spot will keep the price of the commodity at a high level, though perhaps not at 4/-.

The reclaimed rubber figures just to hand from America are extremely interesting. The amount of reclaimed rubber used in the third quarter of 1925 was 29,910 tons, as compared with only 15,231 tons in the corresponding quarter of 1924. The proportion of reclaimed to crude rubber used for the third quarter of 1925 was 32·8 per cent, compared with 20 per cent. in 1924. Not much of this reclaimed has gone into tyres, however, though there is talk of producing a cheap tyre manufactured of reclaimed rubber.

Such tyres would probably wear out very quickly which would again put up the consumption of reclaimed :

At one time during the month 4/9d. was reported to have been paid for spot rubber, and the discount on forward positions narrowed. As a result of the announcement by the Colonial Office that 15 per cent extra of standard production would be released on February 1, 1926, instead of the statutory 10 per cent., forward positions, particularly July-December, 1926, sustained a setback. The usual end of year window dressing, and holding off of American buyers has knocked the market considerably this week.

The London rubber stock figures show that landings amounted to 1,678 tons and deliveries were 1,055 tons. The resulting stock figure of 4,454 tons compares with 31,424 tons at the corresponding date in 1924. From now onwards stocks are expected to increase, unless more fogs, strikes, etc., interfere.

COFFEE

The past month has proved disappointing, prices having fallen, though quantities offered at auction have been modest. Prices for Santos coffee have dropped, for which ample explanation is provided by the decline in Brazilian exchange. Superior Santos failed to attract any volume of business for Europe, though America was a buyer, having to replace about 100,000 bags recently lost by fire in New Orleans. Rio coffee, however, has been of considerable interest to buyers, reaching a price level low in comparison with other sorts.

A gradual but continuous decline in East African descriptions was brought to a halt towards the end of December by reports that small crops of Kenya and Tanganyika are in prospect; and the former variety then and since has sold readily at several shillings above the lowest point touched. A few parcels of new crop Costa Rica partly sold at prices which appeared low but deficient quality was chiefly responsible for this result.

Messrs. Duuring and Zoon's monthly statistics again show how closely supplies released in Brazil are adjusted to the requirements of consumption, for the world's visible supply at the end of November remained practically at the previous month's figure viz :—5,128,000 bags.

Tropical Life for November has an article (reproduced in last week's *The Planters' Chronicle*, Page 20. *Ed.*) dealing with the 'grassy' flavour in African coffee which frequently develops some time after this coffee has been stored. Such coffee has to be taken back by the sellers and exchanged for East Indian or other parcels substituted. In one case it was reckoned that a fairly large parcel would last for fifteen or eighteen months, but after the fourth or fifth month a distinct difference in the flavour was noticed and soon after both seller and buyer agreed that the 'grassy' flavour developed and the coffee was changed. Strenuous efforts are being made to find and remove the cause of this trouble.

Mr. Henry Hoover, United States Secretary for Commerce, continues to attack the high price of coffee, which he attributes to the Brazilian Coffee Defence Scheme.

LONDON,
December 17, 1925.

NITROGEN—ITS IMPORTANCE IN AGRICULTURE

(Concluded from Page 23, issue of January 9, 1926)

A portion of our earth, namely Chile, has by accident or design been set aside as a storehouse for nitrogen in its most available plant food form. This is capable of providing first aid and continued nourishment against nitrogen soil losses. In recent years, as our soils have become exhausted, has this use multiplied many fold here in our own country.

Looking beyond the sphere of cold, dry actualities and expressing imaginative possibilities, an English writer recently suggested the breeding of a new strain of bacteria which would provide in the soil the means of securing all the nitrogen needed for crops—drawing it thus from the atmosphere and thus greatly increasing crop production. For great populations this would be Utopia, indeed. It should be pointed out, however, that bacteria capable of taking nitrogen from the atmosphere can only thrive on soil well provided with lime, with abundance of moisture and with animal or vegetable matter in well-rotted condition, also in abundance. Thus the Garden of Eden is not yet in sight and man's destiny is still to live by the 'sweat of his brow.'

FARM MANAGEMENT ESSENTIAL

Thorough farm management is more important than ever—no fertilizer and no legume can ever substitute for the eye of the Master. There is no royal road to farming any more than there is to learning, but there are helps to farm management and to natural soil resources that are of advantage even to new soils. Plant food deficiencies occur in logical sequence as natural as the setting of the sun. The soil must not be treated as a mine but rather as an instrumentality for the growing of crops.

Soil deficiencies occur most often as to nitrogen, phosphorus and potash. Available nitrogen is most often deficient in the soils of the Atlantic and Gulf States, but even in our Middle States low crop yields suggest the desirability of supplying available nitrogen for better crops.

According to a recent United States Department year book our leading crops remove from the soil much more nitrogen than phosphorus or potash. It is comparatively easy chemically to determine the amounts of phosphorus and potash, but not so easy, except by practical crop growing, to determine the most profitable amount of available nitrogen required for individual locations. In the last analysis a practical trial in the field is what counts. The grower must check for himself and constantly study his condition like a business man.

GROWTH OF CHILEAN NITRATE INDUSTRY

Looking at the nitrogen subject broadly, we find that during the last quarter century the agricultural use of Chilean nitrate has increased in this country many times faster than the use of mixed fertilizers. Although the Chilean nitrate industry is now nearly 100 years old, nitrate having been first exported in 1830, there is still enough, it is estimated to last 300 years.

The fact that the use of this all-American product has increased many times faster here in our country, namely from 16,000 tons per annum in 1899 to nearly 650,000 tons at present, whilst ordinary fertilizer consumption has not much more than doubled in the same period, is not without significance, as is also the fact that in 1919 the U. S. Department of Agriculture distributed 150,000 tons of Chilean nitrate for agriculture use as such. This did not include what was sold to growers through the regular channels of original trade.

The production and consumption of different forms of commercial nitrogen have increased faster than the production of phosphorous and potash during that period. From the practical side, therefore, we regard the possibilities of increased crop production from the increased use of nitrogen as very real and very promising.

In Hawaii, where more nitrogen is used per acre than in any other part of the world, in the growing of sugar cane, the average production per acre is the largest in the world, having been 52 tons of cane per acre in 1923, and compares to an average for the world of less than one-half that amount. Our production in Louisiana is about 11 tons per acre.

USE OF NITROGEN IN EUROPE

A comparison of our crop yields with those of Germany has been recently made by O. E. Baker, of the U. S. Department of Agriculture. The yields per acre in Germany were indicated as being nearly double those of this country. The differences are believed to be due in large measure to the greater proportions of nitrogen used by German farmers. It is calculated that European farmers use on an average 600 pounds per acre of a fertilizer carrying 4.5 per cent of available nitrogen, where burgh on a ton of goods cost \$125.00. Europe and the United States have more railway mileage than any other portions of our earth. The highly organized economic development of these portions of our globe has been most remarkable. To a large extent it has been in proportion to the development of transportation facilities.

The railway man has an opportunity for observation wider far than the average citizen and his views by virtue of this opportunity are bound to be broadminded. His opportunities for service are therefore unusual in respect to public relations. Your attitude toward the unforceable obligations in your sphere of action has been fine and admirable. Your service has been unstinted. Your work more than any other agency has put souls into the bodies of corporations.

The test of an institution or a corporation or of a nation lies in its attitude toward the unenforceable obligations of life. I do not mean merely in respect to the attitude toward 'scraps of paper.' All of us here are aware of the obligations of the written word, but what is our attitude toward the unenforceable? One of the oldest treaties in this country was between William Penn and the Indians. This was never sworn to and never broken, but it worked admirably. The measure of a man in all his relations in life is his attitude toward his unenforceable obligations. In our hearts we know that the communities we serve will measure us by it.

RUBBER SUPPLY AND DEMAND

FUTURE CONSUMPTION

Mr. Eric Miller commenced his speech at the recent Annual General Meeting of Messrs. Harrisons and Crosfield by a retrospect of the year's events in the rubber industry. He confessed that even his faith in the efficacy of the restriction policy had not prepared him for so complete a reversal of the position of the raw material, and he frankly admitted that he had under-estimated the increase in the world's consumption.

The signs were there, he said, and were clearly pointed out, but conservatism is pardonable in anyone who is called upon to express in public a forecast of the trend of future events. In the nature of things, while we are closely identified with the producing side of the industry and have acquired a reasonably accurate knowledge of that, we are dependent on the manufacturing side of the industry for guidance in regard to probable absorption and consumption, and follow closely the policy of manufacturers in the buying of crude rubber, which is so essential to the carrying one of their business. Without being hypercritical, the price movements of rubber during the past two years indicate very clearly that the manufacturers themselves have not, in the main, accurately gauged their future requirements.

It is extraordinary to reflect that notwithstanding the existence of legislation, founded on the Stevenson Scheme, to regulate the exports of rubber on certain lines, governed solely by the price which buyers were willing to pay day by day in the open market, and despite the diminution in visible stocks which was in evidence, the price of standard quality plantation rubber in the London market was 10½d. per lb. as recently as July 1, 1924. An average daily price of 1s. 3d. per lb. was the lowest figure under the scheme which would make increased exports available from the areas where restriction is in force, yet manufacturers generally failed to appreciate the prudent and profitable course for them to pursue. For some years they had been faced with superabundant supplies of crude rubber, and they ceased to pay adequate attention to the part which they were called upon to play in order to provide rationally for their growing needs.

STEVENSON SCHEME NOT WHOLLY RESPONSIBLE

Under the Stevenson Scheme, once the surplus stocks were absorbed, very little foresight was called for to ensure conditions approximating to stability at a very moderate price level, instead of which the average daily price during the quarter May-July, 1924, was under 11d. per lb., while to-day the value is 3s. 11d. to 4s. per lb. Much gratitude has been rightly bestowed on the Stevenson Scheme, I am quite sure the originators of it could not, and would not, claim that the legislation founded on it should be credited with the attainment of the present high price for rubber. A few simple figures will prove this statement up to the hilt. If the average daily price of standard sheet had been maintained at just over 1s. 3d. per lb. since the inception of the legislation to regulate exports, 200,000 tons more rubber might have been exported.

Without, however, relying on the foregoing as proof of my statement, I will go back only as far as the quarter August-October, 1924. The average daily price in that quarter averaged just over one-third of a penny per lb. more and, if in the quarter November, 1924, January, 1925, they had

raised the average daily price by a small decimal point of a penny, 50,000 tons more rubber could have been, and certainly would have been, exported from the restriction areas. I leave it to the judgment of anyone who has knowledge of the industry to say whether there would have been any sensational rise in price during the year 1925 had buyers seen to it that these 50,000 tons of additional rubber were forthcoming.

Even to those who are not familiar with the provisions of the Stevenson Scheme, if the daily price average in the quarter August-October, 1924, had been over 1s. 3d., the rate of export in the quarter November, 1924 to January, 1925, would have been 60 per cent. of standard instead of 50 per cent. Had that been so, and had the daily price in the quarter November, 1924 to January, 1925, averaged 1s. 6d. instead of just under that figure, the rate of export in the quarter February-April, 1925, would have been 70 per cent. instead of 55 per cent. If the price from then on had averaged over 1s. 6d., we should have reached 90 per cent. on August 1 and would attain 100 per cent. at November 1. One of the chief merits of the Stevenson Scheme is its automatic functioning, and any errors of judgment arising out of it cannot be laid at the door, either of the Government who administer the scheme or of their advisers.

NO REACTION ANTICIPATED

The strength of the position at the present time prompts one of my somewhat conservative temperament to search for causes which may bring about a reaction, but I candidly confess that it is not easy to conjure them up. On dead reckoning, however, it is well to be prepared for some natural reaction in the course of next year, but, when supplies become available in excess of immediate needs, the wise manufacturer will increase his holding of crude rubber. I established in my speech last year that the average rate of progressive increase in consumption of crude rubber during the preceding fourteen years was 13 per cent. per annum. Bringing the 1925 probable absorption into my table and correcting the 1924 absorption, which I estimated at somewhat less than it actually proved to be when the year was through, we calculate that the true consumption figure for 1924 shows an increase of $13\frac{1}{2}$ per cent. over 1923, so that the average of 13 per cent. annual increase now holds good over the past fifteen years. The absorption of crude rubber during the current year will be about 560,000 tons, of which 400,000 tons will be used in the United States and 160,000 tons in other countries.

GROWTH OF LOW-PRESSURE TYRES

It is necessary to augment the estimates made a year ago of 1925 absorption by reason of the rapidity with which low-pressure tyres have been adopted in the United States, and elsewhere. In December last the output of balloon tyres in the United States was less than 14 per cent. of their total output of tyres; by May this proportion had increased to 44 per cent, and in the first six months of the current year about one-third of the total tyre production consisted of low pressure tyres. The proportion of such tyres to be constructed during the second half of the year will be greater than that during the first half, and it is expected that the proportion for 1926 will be greater than that for 1925.

OTHER AMERICAN RECORD FIGURES

The agricultural season of 1924 was a prosperous one in the United States, and this has been reflected in the strong demand for motor cars by the agricultural community during the current year. At the end of 1924 it was estimated that the number of farm-owned motor vehicles registered was 3,800,000, or about 22 per cent. of the total registration in the United States, and it is expected that the present season, even although it has not been quite so prosperous, will give rise to a further increase in the farm use of motor transportation. In 1924, 3,144,000 passenger cars and 358,000 motor trucks were built in the United States, and during the first eight months of 1925 over 2,700,000 vehicles were constructed, of which 2,420,000 were passenger cars and 300,000 were motor trucks. The automobile factories are still busy, and it appears likely that the total number of new vehicles built during 1925 will approach 4,000,000.

In addition to the rapid increase in passenger cars and the steady increase in motor trucks, there are two other factors developing in America which are going to have a considerable and increasing effect on the consumption of rubber in that country. The first of these and the more important one is the rapidly increasing number of motor buses, most of which use heavy pneumatic tyres and are in constant use throughout the year. The second is the increasing production of closed cars. In 1919 only 10 per cent. of the total production of cars in the United States were closed. By 1921 this percentage had more than doubled. In 1924 43 per cent. of the total number of passenger cars constructed were closed cars, and during the current year the percentage of closed cars should be over 50. Each of these factors will tend to increase the number of tyres per car per annum for replacement purposes, while the heavy tyres used on motor buses will so tend to increase the average amount of rubber per tyre.

(To be concluded next week).

LETTERS TO THE EDITOR

Coffee Drying Machinery

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

With reference to Mr. E. M. Gray's query regarding Coffee drying Machinery, I should like to inform you that I had an opportunity of observing several of these drying Machines working in Tanganyika Territory, East Africa. The owners assured me that the Driers worked most satisfactorily, and were very pleased with them.

As regards quality of Machine-dried compared with Sun-dried Coffee I found that the former bean was slightly paler in colour than the latter: but as those Estates found it almost impossible to Sun dry their Coffee this slight variegation in the bean was more than compensated for by getting their Coffee properly dried and of an even colour.

SHOLAROCK ESTATE,
KATARY P.O., NILGIRIS,
January, 1926.

Yours, etc.,
E. F. H. GERRARD.

Indigenous Manure

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

I have no desire to cross swords with such a doughty controversialist as Mr. Newcome whose correspondence has elicited no reply—unless from Mr. Newcomb; but I observe that once again the subject of export of indigenous manures has been brought up at the Indian Science Congress.

Surely, all experience shows that the less interference there is between exports and imports the better it is for all concerned. Is that not the ideal of 'Fair Traders?' Of course one can easily see that from an ideal point of view the export of manures may be an advantage, but alas! ideals have to be sacrificed in the hard school of actuality. But if it may be a crime to export manure from India to places abroad, surely it will be no less a crime to export manures from one district to another. Will it not be wrong for the Pariah of say Tinnevely to collect bones to be sent to Coorg? Or will it not be wrong for South Arcot to produce groundnut poonac to be sent to Mysore? There are many hundreds of thousands of acres in these two districts which need bones and poonacs, while I am afraid Coffee will not benefit the lands of these districts to a great extent. Then carrying the argument still further, is it not a crime for North Africa and America to export such enormous quantities of phosphates when there are billions of acres in these countries which may be in a position to make use of these some day?

But after all is the export of fertilizers such a serious matter? I think not as the following figures may show:—

Groundnut poonac which is expored in such large quantities can, I gather, be got in Madras crushed and ready for application at about Rs. 135 per cent ton or probably a little less. As this is for a poonac of 7 per cent. Nitrogen, a Nitrogen content of 19 per cent. would be worth in Madras about Rs. 367 per ton, whereas one ton of Cyanamide 19 per cent. Nitrogen may be got for Rs. 180! India therefore seems to be sensible in exporting a dear material and importing an equally suitable one, but much cheaper. Then as to the vexed question of bones, Bone Meal should be obtainable at present at Rs. 100 at Madras. 100 tons would then be worth Rs. 10,000. The phosphoric Acid in 100 tons of bones might be substituted by the phosporic acid of 110 tons of 20 per cent. Super at Rs. 85 = Rs. 9,350 and the nitrogen by 21 tons of cyanamide at Rs. 185 = Rs. 3885. But the phosphate in Super is soluble in water, while Bone Meal phosphate is not, and as water soluble phosphoric acid is twice as valuable as insoluble, we may quite easily take it that Rs. 5000 worth of phosphoric acid in the shape of superphosphate would be equivalent to the value of phosphoric acid of 100 tons of bones. The totals then would be Rs. 10,000 for exported Bone Meal and, Rs. 8,885 for imported fertilizers, showing again that India is doing a good stroke of business.

Further the question is raised as to why India does not produce oil instead of exporting seeds. The answer is simple—so simple that that is possible why it has escaped the notice of theoretical ideal economists—it *will not pay*.

January 9, 1926.

Yours, etc.,
G. N. POONAC,

U. P. A. S. I. SPORTS CLUB

Planters' Week, 1926

A HANDSOME TROPHY TO BE FOUGHT FOR DURING THE MEET.



THE MEN'S SINGLES TENNIS CHALLENGE CUP

PRESENTED BY

LT.-COL. A. F. HARPER

U. P. A. S. I

Planters' Week, 1926.—(continued.)

CRICKET.—The final match on Sunday, February 28, shown in programme as 'Planters v. Indians', has been changed to 'Planters v. An Ooty United' side which will be composed of half Indians and half Europeans. Mr. Wimbush assisted by Mr. Chockalingam is raising the side.

TENNIS.—Mr. Murphy has expressed the wish that his cup for Ladies' singles be called 'The Ladies' Cup', not 'The Murphy Cup'. He is also very generously presenting the Cup to be won outright each year. Therefore, as the Cup is no longer a 'Challenge' Cup, the conditions are changed accordingly.

MR. MURPHY'S BALL.—Reference the general invitation to the Planting Community published on p. 5 in *Planters' Chronicle*, dated January 2,—Last year approximately 40 to 50 people came to the dance whose names were not on the list of acceptances. This was the cause of the crush; and in no way was the Committee, who was running the dance, to blame. We wish to avoid a reoccurrence of this year, and all who will be attending are urgently requested to reply to the invitation.

CAPT. WINDLE'S LADIES' GOLF CUP.—Reference conditions published in *Planters' Chronicle*, dated January 2,—Clause 2—for 'final 30 holes', read 'final 18 holes'. The donor has requested this alteration as he considers a double round too strenuous for ladies.

NOTICE**The Annual General Meeting**

Notice is hereby given that THE ANNUAL GENERAL MEETING of the Club will be held on Tuesday, February 23, 1926, at the Ootacamund Golf Club House at 6 p.m.

Agenda

- Proceedings of last meeting.
- Subscription rates.
- Club colours.
- Affiliation (by request).
- District Representatives.
- Publication of membership lists (by request).
- Membership rules.
- Married Assistants.
- Election of Office-bearers for 1926-27.
- Any other competent business.

January 8, 1926.

G. W. FULCHER,
Honorary Secretary.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending January 9th, 1926

Bank Selling Demand Draft on London

4th	5th	6th	7th	8th	9th
18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending December 19, 1925	January 1 to December 19, 1925	January 1 to December 19, 1924
TEA (WEEK ENDING DECEMBER 19, 1925)		s. d.		s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 8.45	1 5.68	1 7.92
Sholayar ...	163	1 9½	S. India **1	8.65	††1 5.62	††1 7.02
Thayamudi ...	221	1 9¼	Ceylon...	1 10.76	1 8.09	1 8.77
Mukkottumudi ...	267	1 9	Java ...	1 4.56	1 0.83	1 3.46
Thonimudi ...	172	1 9	Sumatra.	1 8.22	1 4.56	1 5.90
			Nyassa-land.	1 2.28	1 1.24	1 4.57
(b) Central Travancore			Total ...	*1 8.90	†1 6.05	†1 7.79
Stagbrook ...	56	1 9¾				
Caradi Goody ...	97	1 9				
Glenmary ...	79	1 9				
Mount ...	134	1 8				
Dymock ...	102	1 7¾				
(c) Kanen Devans—						
Yallapatti ...	135	1 11¼				
Chockanad ...	139	1 11				
Periavurrai ...	160	1 10¾				
Sevenmallay ...	113	1 10				
(d) Mundakayam—						
Yendayar ...	157	1 7				
(e) Nilgiris—						
Nonsuch ...	123	2 1¼				
Bhawani ...	123	1 11				
Prospect ...	70	1 11				
Craigmore ...	178	1 10				
(f) Nilgiri-Wynaad—						
Woodbriar ...	135	1 9				
Devarashola ...	201	1 8¾				
Seaforth ...	138	1 8¼				
Barwood ...	149	1 7				
(g) Wynaad—						
Chulika ...	75	1 6½				

(b) SPECIAL COFFEE CABLE

LONDON, JANUARY 13, 1926

'A' COFFEE

145s. PER CWT.

MARKET FIRM

** Based on 5,516 packages

†† " " 180,941 "

‡‡ " " 132,182 "

* Based on 71,250 packages.

† " " 3,136,210 "

‡ " " 2,921,434 "

(c) *Précis of reports on London Markets received on January 11 and covering the week ending Saturday, December 19 :—*

(1) *Tea.* The Sumatra average for the week under review, which was 2/4d. above that of the previous week, was really only the price obtained for one parcel of 174 packages which comprised the only Sumatra offered at the sale.

The market on the whole was firm: the better qualities remained steady, while grades below 1/8d. per pound were in special request and in most cases registered an advance.

The Indian Tea Association estimates that the crop to the end of November 1925 was 305½ million pounds as compared with 315¾ millions and 317 millions respectively during the same periods of 1924 and 1923.

There were to be no further auctions until January 4.

(2) *Rubber.* At the close of the week under review; 4/1d., 3/10¾d., 3/7¾d., 3/2¾d., and 2/8d. were the respective quotations for Spot, January-March, April-June, July-December, and 1927 deliveries of Standard Ribbed Smoked Sheets. The corresponding prices seven days previously were :— 4/7¾d., 4/5½d., 4/2½d., 3/9d., and 3/½d.

(3) *Coffee.* The market on 'Spot' was steady; while good quality Kenyans under good home trade competition readily sold at prices about 4s. per cwt. in advance of those ruling two weeks before. There was a complete absence of enquiry for East Indians c.f.i., owing to the crippling of the two principal markets—Germany and France—by respectively the Banks' refusal of financial credits, and the very heavy depreciation in the Franc. The next public auctions will be held on January 5.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, January 9, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	1·21	91·64	92·85	19. Coonoor ...	0·88	72·63	73·51
2. *Tenmalai.	0·76	99·18	99·94	20. Kotagiri ...	2·90	58·98	61·88
3. Mundakayam.	5·07	150·94	156·01	21. Ootacamund	0·02	49·16	49·18
4. *Peermade.	2·25	171·00	173·25	22. Yercaud ...	0·10	51·25	51·35
5. Twyford ...	0·88	201·11	201·99	23. Devala ...	0·85	130·81	131·66
6. V'periyar ...	0·33	80·40	80·73	24. Gudalur ...	0·95	73·35	74·30
7. Kalaar ...	1·51	210·52	212·03	25. CALICUT ...	0·15	134·37	134·52
8. Chittuvurrai	0·64	58·44	59·08	26. Kuttiyadi ...	0·00	178·34	178·34
9. BODI'KANUR	0·55	25·37	25·92	27. Vayittiri ...	0·30	159·76	160·06
10. COCHIN ...	1·10	109·31	110·41	28. Manantoddi.	0·00	110·85	110·85
11. *Mooply ...	0·73	113·15	113·88	29. Billigiris ...	0·22	65·38	65·60
12. MooplyValley	0·10	124·95	125·05	30. *Sidapur ...	0·00	74·44	74·44
13. Pachaimalai	1·00	122·94	123·94	31. Pollibetta ...	N.R.	85·38	N.R.
14. Mudis ...	0·89	201·60	202·49	32. Somwarpett	0·02	N.R.	N.R.
15. POLLACHIE.	0·00	30·02	30·02	33. Ballupete ...	0·15	75·86	76·01
16. Manjeri ...	0·00	125·76	125·76	34. MANGALORE.	0·00	139·39	139·39
17. Nilambur ...	N.R.	101·11	N.R.	35. MADRAS ...	0·00	62·24	62·24
18. Naduvattam	0·73	83·11	83·84				

W = During the week.

P = Previously.

N.R. = No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 4] SAT., JANUARY 23, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	49	Letters to Editor—	
U.P.A.S.I. General Committee Meeting ...	51	Motor Mileage ...	56
R.G.A., S.I. Branch Meeting ...	51	Grassy Flavour in Coffee ...	58
Rubber Supply and Demand ...	52	A 2nd hand Ford ...	58
W.C.P.A. Meeting ...	53	U.P.A.S.I. Sports Club—	
		Membership List... ..	59
		Planters' 77week	61
		Exports of Coffee, Rubber & Tea	62
		Commercial and Meteorologi- cal	63

EDITORIAL NOTES

By a very sad coincidence we have heard on the same day of the deaths of Mr. F. Mangles in England on December 17 and of Mr. G. R. Pearse in Mercara on January 9.

The former of the two deceased gentlemen, who was head of Messrs. Mangles' Bros., was, we understand, a member of the Coorg Planters' Association as far back as 1882; while the latter had been a member of that Association since 1904 and was Resident Manager in charge of the five Coorg Estates of Messrs. Mangles' Bros. at the time of his decease.

It must be almost unprecedented for a firm to loose within a month two members who had spent their active planting life on the same Group of Estates. We extend our hearty sympathy to the bereaved relatives; to the Firm which has lost both its Managing Director and its Resident Estate Manager; and to the Coorg District which bemourns the loss of two valued friends.

The Secretary asks us to draw attention to the Notice on page 52 regarding the forthcoming meeting of the South Indian Branch of the Rubber Growers' Association at Cochin, to meet the Secretary of the Rubber Growers' Association, London, Mr. F. G. Smith

We are glad to note that the Dewan of Travancore gave Messrs. John Mackie (Harrisons and Crosfield), J.B. Cook (Planting Member in the State Legislative Council), and J. R. Vincent (of Kutikul Estate) a very sympathetic hearing when they recently waited on him in connection with the proposed levy of Income Tax on Edavagais or freehold estates. It will be remembered

that the Planters appealed successfully to the High Court against the ruling of the Income Tax authorities that Edavagais were subject to Income Tax under the existing rules. The Government however straightway introduced a Bill to amend these rules so that Edavagais would be no longer exempt. The Government land tax per acre on non-Edavagais is Rs. 2 for Government and Re. 1 for Jemni lands under Rubber, and Re. 1 for Government and Re. 0-8-0 for Jemni lands under Tea. The incidence of the Income Tax would range from 15 to 25 times as high; so the deputation had little difficulty in showing how arbitrary the proposed Income Tax Regulations Amending Act would be from the point of view of the Planting Community, whose enterprise reacts so favourably the prosperity of the State.

The deputation prayed that the Government—if absolutely resolved to render Edavagais liable to taxation and to determine the privileged exemption which these Freeholds had so long enjoyed—should in no case exact a higher levy than that which it presently imposed in the form of land tax on non-Edavagai lands. The Dewan while assuring the Deputation that he himself would consider their representation most carefully, suggested that it should lay its case also before the Legislative Council Members whose vote for or against the proposed Act would necessarily carry considerable weight.

Thanks to Mr. W. A. J. Milner, we are glad to be able to place on record the names of most of the Chairmen and Honorary Secretaries of the Central Travancore Planters' Association since 1894 :—

Year	Chairman	Hon. Secretary	Year	Chairman	Hon. Secretary
1894	W. S. Imray	G. L. Acworth	1911	W. H. G. Leahy	J. S. Wilkie
1895	Not known	Do.	1912	F. Bissett	{ R. E. Haslam }
1896	Do.	Do.			{ R. P. Roissier }
1897	F. M. Parker	Do.	1913	F. Bissett	R. P. Roissier
1898	Do.	H. W. Baker	1914	H. C. Westaway	Do.
1899	R. Goldie	A. E. Veale	1915	Do.	Do.
1900	H. M. Knight	Do.	1916	F. Bissett	W. A. J. Milner
1901	Not known	W. H. G. Leahy	1917	J. S. Wilkie	W. F. Stephen
1902	G. L. Acworth	D. McArthur	1918	D. McArthur	T. A. Kinmond
1903	Not known	E. Latter	1919	J. S. Wilkie	W. A. J. Milner
1904	Buxton Lawrie	F. Bissett	1920	Do.	Do.
1905	W. H. G. Leahy	F. W. Le Feuvre	1921	E. C. Sylvester	A. R. St. George
1906	H. S. Holder	Do.	1922	Do.	W. A. J. Milner
1907	Do.	A. H. Mead	1923	J. S. Wilkie	Do.
1908	D. McArthur	F. E. Thomas	1924	E. C. Sylvester	Do.
1909	J. A. Richardson	T. C. Forbes	1925	Do.	Do.
1910	W. H. G. Leahy	H. C. Westaway			

Perhaps other Honorary Secretaries who have access to as early or earlier records will similarly use their opportunities and send us in due course the results of their research.

The Madras Government has appointed the following Committee to advise them with regard to the amendment of the Madras Planters' Labour Act :—

The Hon'ble Khan Bahadur Mahomed Usman Sahib, Home Member (Chairman); Mr. N. Macmichael, I. C. S., Labour Commissioner; Mr. R. Fowke, Chairman of the United Planters' Association of Southern India; Capt. E. G. Windle, M.L.C.; Dewan Bahadur P. Kesava Pillay, M. L. C.; and Mr. J. A. Saldanha, M. L. C.; Rao Bahadur V. T. Krishnamachari, C. I. E., will be Secretary to the Committee.

At the one day's session of the Coorg Legislative Council held under the Presidency of the Hon'ble Mr. Pears, Chief Commissioner of Coorg, on Tuesday the 12th instant, Mr. T. J. Tasker, I.C.S., on behalf of the Coorg Government moved for, and obtained, permission to introduce a Labour Bill in supersession of the Indian Breach of Contract Act which lapses next March. The Bill after introduction was referred to a Select Committee, consisting of Messrs. L. Newcome, A. B. Chengappa, S. M. Pinto, M. M. Chinnapa, P. T. Kushalapa and N. R. Subbaraya, who are to report on it before the 25th of this month.

*The Coorg
Labour Bill*

THE UNITED PLANTERS' ASSOCIATION

OF

SOUTHERN INDIA

(INCORPORATED)

NOTICE IS HEREBY GIVEN that a MEETING of the GENERAL COMMITTEE of the above-named Association will be held at Ootacamund on Tuesday, February 23, 1926, commencing at 11.30 o'clock in the forenoon.

Agenda

1. To confirm the proceedings of the last meeting.
2. The Budget, 1926-1927.
3. Currency Notes (Refund) Rules.
4. The Cochin Port Trust—Planters' Trustee.
5. Rules of the European Employees' Provident Fund.
6. Labour Laws.
7. Labour Department.
8. Indian Employees' Provident Fund.
9. Passages to wives of the European Employees.

By order of the Chairman,
H. WADDINGTON,
Secretary.

January 16, 1926.

RUBBER GROWERS' ASSOCIATION

SOUTH INDIAN BRANCH

• Notice

Mr. F. G. Smith, the Secretary of the Rubber Growers' Association, London, will be visiting Southern India early in February, and has expressed a wish to meet the members of the new Committee formed under the reorganization scheme put forward last year.

It is intended to hold a meeting at Cochin, but as the date of Mr. Smith's visit has not yet been fixed, the actual date of the meeting cannot yet be announced. As much notice as possible will however be given, and the Chairman of the South Indian Branch hopes that all estates, belonging to the Rubber Growers' Association, will send representatives to the meeting.

H. WADDINGTON,
Secretary.

January 18, 1926.

RUBBER SUPPLY AND DEMAND

Mr. Eric Miller's Views

(Continued from Page 41, Issue of January 16, 1926)

TYRE STOCKS

Stocks of tyres in the hands of dealers are stated to be considerably higher than they were a few months ago, but the stocks in the hands of the manufacturers have been reduced by about 3,000,000 tyres in the same period, and, moreover, with an increasing number of cars in use, a greater stocks of tyres has to be carried by the dealers. Nevertheless, the total stocks of tyres in the United States are probably greater, both absolutely and relatively to the number of cars in use, than they were a year ago.

The absorption of crude rubber by the rest of the world during 1925 will be about 25,000 tons more than in 1924, the most noteworthy increase being that of Germany, whose absorption has increased from 22,000 tons in 1924 to over 40,000 tons during the current year. In no manufacturing country, with the exception of Japan, has the absorption decreased, and, as in the case of the United States, the increased absorption is mainly accounted for by the increasing use of motor transport. At the end of last year it was estimated that 3,700,000 automobiles were in use in countries outside the United States, and by the end of this year the total should be over 4½ millions.

THE DEMAND FOR RECLAIMED

During the first seven months of the current year the world's stocks of crude rubber have been reduced by over 60,000 tons and of this reduction 25,000 tons came from the London stocks, which to-day are only 5,000 tons. The high price of crude rubber is undoubtedly stimulating the use of reclaimed rubber, and this will have to be allowed for in estimating future absorption.

America is the only country for which we have any data on the use of reclaimed rubber. According to a census made by the War Department for the year 1917, the amount of reclaimed rubber used was 89,000 tons and was equivalent to 36 per cent of the total absorption of crude and reclaimed. This percentage varied with the nature of the manufactured product; for automobile tyres and tubes it was very small, whereas it rose to as much as 60 per cent in other classes of rubber goods. Detailed data are not available for any other year, but, working on the figures of the Rubber Association of America, it would appear that for the years 1919 and 1920 the percentage was 26; it dropped to 20 in 1921 and to 16 in 1922; for the years 1923 and 1924 it was just over 18, and during the current year it will be about 22. These percentage figures are based on weight of material used, and, for practical purposes, 3 lb. of good quality reclaimed rubber is required to replace 1 lb. of crude rubber; therefore a rise in the percentage of reclaimed may roughly be divided by three in order to arrive at its real effect on the rubber situation. In the case of motor tyres, where any reduction in quality cannot ultimately be disguised from the consumer, I imagine that reclaimed will play only a small part, but the use of it will undoubtedly extend in the case of certain other rubber goods.

NEW RUBBER AVAILABLE

We estimate that the new rubber available for shipment during 1925 will approximate 500,000 tons dry weight, about 10,000 tons more than last year; of this increase only a small fraction is wild rubber.

Native rubber in the Dutch East Indies again shows an increase over the previous year, but their 1925 production probably carries a greater percentage of moisture. Reports are now available on the investigations which have recently been carried out by Dutch officials and British planters in the districts of Djambi, Palembang, and Banjermassin; and these taken in conjunction with the latest export figures, indicate that, for the present the output of this native rubber is approaching its limit, and that little increase can be looked for until the new trees now being planted come into bearing five or six years hence. By that time, however, over tapping, inadequate upkeep, and the ravages of bark disease will have seriously curtailed the potential output from those trees which are now in tapping. I may as well remind you that it is less than 18 months since the world was informed that the plantation rubber industry was doomed, and that it was only a matter of time until native producers would dominate the situation! Although that was a distortion of the facts, the possibility of further expansion of native production a few years hence cannot be left out of account. The much-advertised developments in Liberia, under American auspices will be watched with interest.

(To be concluded next week).

DISTRICT ASSOCIATION MEETING

THE WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

**Minutes of an Extraordinary General Meeting held on Saturday, January 2, 1926,
at the Malabar Club.**

Present

Messrs. H. J. Walmesley (*Chairman*), T. W. H. Fitchett, H. R. Carson Parker, P. N. Ashby, W. L. Bruce and C. E. M. Browne (*Honorary Secretary*).

1. The Minutes of the last meeting were read and confirmed.
2. *Personal Membership*.—This was discussed at some length and the following resolution proposed by Mr. Fitchett and seconded by Mr. Ashby was carried:—

‘That the personal membership subscription to this Association be reduced from Rs. 12 to Rs. 5 and that the Honorary Secretary be instructed to make arrangement for the necessary alteration to be made to the Articles of Association.’

3. *Labour Department—Passages*.—The Secretary read correspondence on the subject and the following resolution was proposed from the Chair and carried unanimously:—

‘This Association is opposed to the granting of free passages to the wives of any officials of the U.P.A.S.I. until the Owners and Directors of the majority of Estates in this Association express their approval of the principle by granting free passages to the wives of the Managers and Assistants.’

4. *U.P.A.S.I. Sports Club.*—The Honorary Secretary was instructed to pay Rs. 50 to the funds of the above Club and was instructed to send reminders to members who have not paid their subscriptions.

5. *Planters' Benevolent Fund.*—The attention of the meeting was drawn to the inconvenience caused by the collection of subscriptions both by the Honorary Secretary and the Secretary of the U.P.A.S.I. and the following resolution proposed by Mr. H. R. Carson Parker and seconded by Mr. Browne, was carried unanimously :—

‘That this Association is not in favour of subscription to the Planters' Benevolent Fund and Sports Fund, etc., being collected by the Secretary, U.P.A.S.I., and that in future all such subscription be collected by the Honorary Secretary of this Association.’

6. *Malabar District Board.*—Mr. Fitchett drew the attention of the meeting to the fact that this Association has no member on the Malabar District Board and the following resolution proposed by Mr. Fitchett and seconded by Mr. Bruce was carried unanimously :—

‘That this Association draws the attention of the Government of Madras to the fact that this Association is not represented on the Malabar District Board and requests that a seat be offered to one member in view of the large Planting Capital invested in the District.’

7. *Currency Notes.*—The Honorary Secretary was instructed to write to the Secretary, U.P.A.S.I., confirming his action *re*—cutting of currency notes.

8. *Accelerated Train Service.*—The Association was strongly in favour of the proposed acceleration in the train service from Bombay.

9. *Reorganization of the R.G.A.; S.I. Branch.*—The Chairman addressed the meeting as follows :—

To the best of my knowledge the present position regarding the reconstitution of the South Indian Branch of the R.G.A. is as follows :—

Proposals were sent out from the R.G.A. at Home for the reconstitution and were brought before the last meeting of the U.P.A.S.I. at Bangalore. Mr. Miller, Chairman of the local R.G.A., proposed an amendment and subject to this amendment, which in my opinion emasculates the whole scheme, the proposals were carried.

It has been said that what discussion occurred at the meeting, was between Rubber Planters only; no one else taking part at all, and that consequently the arrangement come to, was the expressed wish of the Rubber Interests.

I entirely disagree with this view and would like to put before you the circumstances under which the amendment was carried.

I understand the scheme was drawn up in London in May and was presumably sent out fairly shortly after. At any rate the Chairman of the South Indian Branch R.G.A. did instruct the Secretary to send copies to the District Planters' Associations on July 20. These copies were not sent and consequently our Delegates and presumably Delegates of the other Rubber Planters' Associations arrived at the meeting without the slightest idea that the scheme was to be brought up and without any instructions whatever from their Associations as to what line they were to take.

Under the circumstances, it is not correct to say that the amendment which was carried, expressed the considered opinion of the rubber interests.

Another point brought forward is that the handing over of the control and funds of the Mycological Station to the proposed New Committee is not on fours with the handing over of the Labour Department Control and funds to the Labour Control Committees as the R. G. A. Committee is not actually part of the Upasi. This difficulty could easily be overcome by making the Committee chosen by the three Rubber Planters' Associations, a Sub-Committee of the Upasi for rubber. It is not necessary for me to go into my reasons for wishing a strong R.G. A. Committee, fully, now, as in accepting the remainder of the scheme most supporters of the amendment also appear to wish for this. It does seem to me, however, that most of the objects and reasons given in the Anamalais scheme for the re-organization of the Labour, (page 35 of the 1924 Proceedings), apply with equal force to the present scheme suggested by the R. G. A. at Home for the re-organization of our local Committee. My point is that, unless the committee or in other words the three Rubber Associations are given control of the Mycological Station, which they alone paid for, and of the income from the cess which they alone contribute (I suggest no subsidy from Upasi in general such as is given to the Labour Department) the whole scheme will die from inanition, and we may as well decide straight away to abolish the Committee and transfer its functions to the Executive Committee of the Upasi, which is, of course, the object of some of the opponents of the scheme.

So far from wishing to see any attempt at disrupting the Upasi, I personally wish to see it grow stronger and stronger, and I am content to continue to pay for our loyalty as we are now doing by unanimously refusing subscriptions offered to the Mycological Station unless subscribers will also join the Upasi. By doing this, I estimate that we are increasing the cost of the station to ourselves by several thousand rupees annually.

My excuse for occupying your time is that we ought to-day to elect two of our members to serve on the New R. G. A. Committee and it is essential that you should clearly express your views and give your representatives full instructions.

Mr. Frank Smith, the General Secretary of the R. G. A., is expected to visit India in February and it is hoped that the new committee will have been formed by then and will be able to meet him and discuss with him the future of the South Indian Branch.

After discussion the following members were appointed to the New R. G. A. Committee and instructed to deal with matters concerning the reconstitution of the R. G. A. ; S. I. Branch :—

Messrs. H. Walmesley and

H. R. Garson Parker.

The following resolution proposed from the Chair was carried *nem con* :—

' That the New Committee of the R. G. A. (S. I. Branch) be asked to call a general meeting of all Rubber Planters at an early date to discuss the future of the S. I. Branch and that this meeting is of opinion that whatever scheme is adopted, should secure the control of working of the Mycological Department by this Committee.

A copy of this resolution to be sent to the Chairman, R. G. A. S. I. Branch and all Rubber Planting Associations.

The meeting terminated with a vote of thanks to the Chairman and to the Malabar Club.

H. J. WALMESLEY,
Chairman.

C. E. M. BROWNE,
Honorary Secretary.

LETTERS TO THE EDITOR

Motor Mileage

'HOW IS IT DONE?'

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

Salem Indian Motor hire firm charge 12 annas per return mile.

Can it be that they make profit?

Coimbatore ,, ,, ,, charge Re. 1 per return mile.

Indubitably they also make a profit?

U. P. A. S. I.

pouch Re. 1-3 per return mile.

Can it be that *they also* make a profit?

Yours, etc.,

'DONE?'

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

With regard to the correspondence relating to motor mileage which is appearing in your pages, the cost of running a motor depends on too many factors ever to be settled to the satisfaction of all. If an average sum is granted, some men will make over it and some will lose. Motorists may, generally speaking, be divided into three :—

- (a) those who know something about cars and do not keep a driver,
- (b) those who know something about cars and do keep a driver, and
- (c) those who know nothing about cars and keep a driver.

It stands to reason that the (a) class man will as a rule run a car cheaper than the (b) class man, and (b) cheaper than (c), for not only does the (a) class man have no driver to pay but he does not suffer from the numerous 'wants', and possible petty thefts and destructive driving of the paid chauffeur. He also probably saves 10 per cent on his insurance, and if he is anything of a mechanic he can run his car more economically than the other classes. The (b) class man is able to keep a certain check on his driver by reason of his knowledge, but the (c) class man had better travel by bullock cart if he does not want to lose over his T. A.

Running costs also largely depend on the type of car used, state of the roads traversed, local cost of petrol, distance travelled per year, and many other items too numerous to mention. The larger and heavier the car, the greater as a rule will be petrol and tyre consumption, though if the car is too light for the work it has to do, the result will be shown in increasing repair bills. The more expensive the car, the higher will be the insurance, depreciation charges and interest on capital invested. Bad roads increase running costs, especially as regards petrol and tyres, to say nothing of repair bills for springs, etc., but careful driving can do much to reduce these costs. Another item on which the cost per mile depends is the annual mileage, because certain annual expenses are constant such as Insurance, Tax (if any), Interest on Capital, and to a certain extent,

chauffeurs' wages. The further a car is driven in a year, the smaller proportion of these constant charges falls to each mile.

Personally I see no reason why a man in category (a) should not be able to run a suitable car over district roads at six annas per mile, even over such roads as the Labour Department Officials have to go. I reckon that my Ford costs me less than this, and I see no reason why a man should not save at this figure when conditions are favourable to make up for times when conditions are bad. The (b) class man, with the luxury of a driver may spend up to two annas a mile more, it depends on what his driver costs: the (c) class man may spend anything.

I append what I think it should cost a careful driver to run a Ford car at the rate of 6,000 miles a year, putting the useful life of the car at 30,000 miles, and its value as Rs. 500 at the end of that time. These figures are based on facts. No allowance is made for tolls and ferries as these items vary too much.

		RS	A	P
Petrol, 25 m.p.g. at Re. 1-14-0 per gallon	per 10 miles	0	12	0
Tyres, average 6,000 miles each, at Rs. 75 each	„ „ „	0	8	0
Oil, 1 gall per 1,000 miles at Rs. 5				
Grease, waste, etc., Rs. 1-4-0 per 1,000 miles	„ „ „	0	1	0
Cost of car with necessary extras Rs. 2,600	}	1	0	0
Cost of repairs, renewals, etc., at Rs. 180 per annum =Rs. 900, less value after 5 years, =Rs. 3,000				
Interest on 3,000 at 5 per cent = Rs. 150	„ „ „	0	4	0
Insurance at Rs. 60 a year (average)	„ „ „	0	1	6
Cost of cleaner at 12-8-0 a month	„ „ „	0	4	0
	Total	2	14	6

This works out to 4.66 or four annas eight pies per mile.

KELAGUR ESTATE,
JAVALI P. O.,

KADUR DISTRICT,
January 12, 1926.

Yours, etc.,
E. L. POYSER.

Motor Mileage

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

In reply to A. C's letter of Jan. 9. Mr. Tipping's letter, which I presume he had not then seen, is a sufficient proof that 6 as. a mile is ample. Though convinced, after driving a Ford for the last 10 years, that that rate is almost excessive for Fords: I have not kept figures for the long period that is necessary. But a friend has kindly supplied me with figures: though for a Rs. 4,000 car (instead of a Ford costing a little over Rs. 2,000) which is sufficient evidence. I am not aware that interest on capital is usually considered in running costs; and A. C. is apparently writing on behalf of Labour Department, who do not have to find that capital. Still, to please him, we will include that also.

Car costing Rs. 4,000. Average mileage per month 1,000.

Depreciation :—Rs. 100 per month. (i.e. to pay for car in 3 years or after 36,000 miles).

Petrol :—Rs. 100 per month (at 20 miles per gallon at Rs. 2 per gallon.)

Tyres and tubes :—Rs. 80 per month (allow 5,000 miles per tyre and tube which is low.)

Oil and Insurance :—Rs. 25 per month.

Interest on capital, at 6 per cent :—Rs. 20 per month.

Adjustments, replacements and repairs :—Rs. 20 per month—This is large as any accidents would be covered by insurance).

Driver :—Rs. 30 per month.

Total Rs. 375 per month. 6 as. a mile for 1000 miles=Rs. 375.

SOMWARPET,

N. COORG,

Yours, etc.,

L. NEWCOME.

January 16, 1926.

'Grassy Flavour in East African Coffee'

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

After reading the article copied from *Tropical Life* in your issue of January 9, on the above subject; the fact that forces itself most strongly on one is that the East African planters would be wise to look to the after-preparation of their coffee, from the time it is picked, until it reaches the consumer.

Soil, method of cultivation, etc., will no doubt influence the flavour of the product grown on it; but in this case one will have a flavour that is characteristic in the whole, whereas in the present instance one has a 'grassy' flavour that is not always present, but develops in the beans if kept in certain instances. This proves that, as coffee is known to be very liable to take up any odour, once it has been picked, that as likely as not the cause of 'grassyness' is in the preparation, or during transport, or storage. Coffee during drying will if covered with straw, as a protection from rain, have a peculiar taste when roast; as will also coffee, that has been shipped Home in the same Hold with some other product that has an odour of its own, and even a few beans will under certain conditions upset the whole flavour of a consignment. For instance, so-called 'Un-clean'—i.e., berries, that though they look all right, but which on being cut open have a putrid odour—will infect their unpleasant odour to a whole roast, as will beans which are called 'Quakers', i.e., beans that are white in the 'roast' and split, and convey their unpleasant flavour to the whole. A few bags contaminated by some odour, will if mixed with the rest, convey this odour in time to the whole quantity.

It would be interesting to know in what manner the coffee complained of is prepared for the market, and also if it is mixed with other products either at the port of shipment, or during the voyage—for instance with Fibre which is largely shipped I believe from East Africa—as the cause for this so-called 'grassy' flavour may well be accounted for thus.

Yours, etc.,

E. W. R.

(Perhaps some of our readers, e.g. Mr. E. F. H. Gerrard, with East African experience, will kindly favour us with their views *Ed.*)

A Second-Hand Ford

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

We wish to correct a small error in your issue of the 16th instant in which you state, under the heading of 'Editorial Notes', that we had asked you to advertise a second-hand Ford Car for sale.

While grateful to you for your advertisement we beg to point out that it was not inserted at our request; we merely sent to you, along with the Coffee Market Report we issue to our constituents, a notice to the effect that the car in question was for sale—with no intention as regards publication.

We ask you to be good enough to publish this letter in order to remove any false impression, though in doing so we quite realize that we are furthering the advertisement of the car in question, which we can assure you and your readers is a genuine bargain—never sick or sorry—no vice—has won races—and recently been used to teach a lady to ride.

MANGALORE,

Yours, etc.,

per pro PEIRCE, LESLIE & CO., LTD.

January 18, 1926.

J. C. HOWISON.

[When circulars are addressed to us in our Editorial capacity, we presume publication is desired; and we acceded in this instance to the in our opinion implied request, as it emanated from a Firm which has advertised weekly in this paper for very many years. *Ed.*]

U.P.A.S.I. SPORTS CLUB

List of Members whose 1925 26 Subscriptions had been received at the U.P.A.S.I. Office on or before Saturday, January 16, 1926

Anamalais—

The Association
Armitage, S. R.
Beadnel, E. H.
Bulsteel, R. C.
Carless, J. E.
Clarke, C. F.
Collet, H. S.
Cotton, A. C.
Danagher, A. V.
Daughlish, J. H.
Diaper, F. J. B.
French, C.
Gibson, G.
Gordon, F. L.
Hammond, E. V.
Harris, L. N. S.
Hetherington, O. M.
Hoskins, F. C.
John, B. L.
Johnson, E.
Jones, J. H. Ireland
Lardner, J. J.
LeMesurier, G. A.
Martin, W. H.
Maule, E. G. F.
Mayow, C. W.
Napier, C. L.
Ogilvy, W.

Pittock, C. K.
Ransford, C. E.
Reade, G. B.
Reilly, W. V.
Ryan, T.
Salmond, W. B.
Sampson, J. E.
Schwind, F. L.
Simmons, F.
Sladden, D. A.
Sladden, S.
Steven, G.
Stockwell, T. G.
Stone, E. A.
Sweet, R. M.
Walker, R.
Williams, J. L. H.

Central Travancore—

Cantlay, J. H.
Gibson, H.
Madden, C. J.
Milner, W. A. J.
Sylvester, E. C.

Coorg—

The Association.
Bentley, R.
Davies, W. A.
Humphreys, H. C.

Magniac, A. F.
Newcome, L.
Nicolls, A. E. J.
Pearse, G. R.
Sprott, J. H.
White, G. P.
Wright, W. R.

Kanen Devans—

The Association.
Bond, H. A.
Bridgeman, J. M.
Brown, R.
Campbell, P. G.
Clarke, W. H.
Cole, G. W.
Cullen, R. B.
Gillies, G. S.
Gouldsbury, C. P.
Grant, C. A. V.
Gray, J.
Hawkins, J. S.
Holden, G. A.
Jack, G. L.
John, A. W.
John, C. H.
Kirby, H.
Koechlin, M. C.
Laird, W. P.

U.P.A.S.I. SPORTS CLUB—(continued.)

Membership List—(continued.)

Macgregor J. N.
Mackay, H. S.
Mackenzie, W.
Marshall, H. G.
Mathews, B. H.
McCankie, E. C.
McIntyre, D.
Milne, W. O.
Mitchell, C. H.
Murray, A. G.
Nicolson, J. A.
Paterson, J.
Pinks, E. M.
Ragg, H. A.
Rees, D.
Ross, K. M.
Steven, A.
Strachan, E. G.
Strachan, G. R.
Swayne, H. C.
Swayne, J. C.
Thomas, H. O.
Waghorne, G. E.
Wallace, J. S. B.
Watson, H. J.
Wright, A. J.

Mundakayam—

Brook, G. A.
Calderwood, M. S.
Caruth, J. C. M.
Conner, E. S.
Macpherson, H. B.
Macpherson, G.
Rutherford, G. A.
Symons, J. S. P.
Vincent, A. D.
Wyer, O. J. Egan.

Mysore—

The Association.
Allardice, H.
DeWeck, M. A.
English, H. H.
Newcome, L.
Nixon, E. M.
Oliver, R. O.
Watson, H.

Nilgiris—

Daubeney, C. R. C.
Daubeney, H. F. C.
Downing, A. K. Weld.
Elkington, L. G.
Ives St. John, C. (L. M.)
Lake, L. F.
Layard, R. J.
Richardson, J. A. (L. M.)

Nilgiri-Wynaad—

The Association,
Adkins, J. B. (L. M.)
Baillie, W. K.
Bellers, T. W. H.
Bisset, J. W. G.
Blackham, J. C.
Commin, C. O.
Farmer, F.

Footte, A.
Fowke, R. (L. M.)
Fulcher, G. W. (L. M.)
Geddes, E. M.
Koechlin, E. A.
Mackintosh, D.
McBride, J.
Merson, D. T.
Morrow, R. M.
Naylor, P. A.
Nicolls, J. C.
Nicolls, R. M.
Scott, F. C.
Trafford, J. B.
Walker, C. E. C.
Walker, C. R. W.
Wright, M.

South Travancore—

Cook, J. B.
Cowdray, E. A.
Farr, E. T. C.
Gillespie, W.
Glen, J. C. G.
Hoare, N. W.
Jackson, T. L.
Lodge, A. P. D.
Millar, F. G.

West Coast—

Brameld, G. M.
Browne, C. E. M. (L. M.)
Campbell, W. F.
Fetherstonhaugh, M. R.
Flanagan, E. B.
Lescher, R.
Leslie, H. C.
Murray, J. T.
Prager, W. W.

Wynaad—

The Association.
Bate, D.
Bayzand, G.
Behr, B. M.
Boulton, B. St. J.
Broadhurst, W. T.
Craig, W. G.
Creed, R. S.
Davies, H. C. (L. M.)
Eyre, E. E.
Finlayson, I. W.
Gwynne, J. A.
Hammond, H. J. C.
Hay, R. M.
Hayne, L. C. G.
Heron, W. S.
Hutton, H. W.
Janzen, E.
Lang, A. L.
Leslie, R. A.
Mackay, M. W.
Peachy, A.
Pryor, K. C.
Reynolds, W. A.
Steward, E. C.
Strachan, J.

Sullivan, J. H. B. (L. M.)
Swayne, R. P. N.

U.P.A.S.I.—

Brock, C. H.
Dunning, A.
Dunning, A. G. A.
Mackie, A. H.
McDougall, A.
Waddington, H.

DONATIONS—

Barwood Estate,
DeCourcy, H. F.
Murphy, J. J. (for cup).
Nicolls, J. S.
Richardson, J. A. (for cup).

LIFE MEMBERS—**Anamalais—**

Congreve, C. R. T.
Cooper, D.
Hardy, E.
House, E. N.
Lloyd, J. A. R.
Robinson, J. Hatton.
Simcock, E. W.

Central Travancore—

Wilkie, J. S.

Kanem Devans—

Dixson, W. J.
Lee, W. A.
Pinches, H. L.

Mundakayam—

Murphy, J. J.

Mysore—

Godfrey, C. H.
Poyser, E. L.

Nilgiris—

Barber, Sir F.
Ives, C. St. John.
Richardson, J. A.
Windle, Capt. E. G.

Nilgiri-Wynaad—

Adkins, J. B.
Aird, J.
Cuthell, H. L.
Fowke, R.
Fulcher, G. W.
Nicolls, J. S.

South Travancore—

Lord, E.

West Coast—

Browne, C. E. M.
Langley, W. K. M.
Walmesley, H. J.

Wynaad—

Davies, H. C.
Gauld, T. P.
Powell, S. H.
Sullivan, J. H. B.
Whitton, N. C.

U. P. A. S. I., SPORTS CLUB—(continued.)

Planters 'Week', 1926

INTER DISTRICT TENNIS.—The scoring for the International 'DAVIS' Cup is as under :—

Each match whether singles or doubles counts a point ; the total number of points possible being 5. There are 4 single matches and 1 double. The usual practice is to play 2 singles first and then the doubles, when, if the match is not decided, the remaining singles are played off. A team can consist of 2, 3 or 4 players and it is not necessary that the singles players be the doubles players.

These are the scoring conditions under which Inter District Tennis is to be played in future.

Note.—Presumably with teams of 2 and 3 players, 1 single is played and then doubles, and the 3rd single not played with teams of 3—The Committee will decide these points.

'VETERANS' TENNIS CUP CONDITIONS.—

1. The Competition shall be open to all members of the UPASI Sports Club who have attained the age of fifty years, and shall be played annually during Planters' Week.

2. Each match shall consist of the best of three setts.

3. It shall be a handicap competition, the handicapping to be in the hands of the Upasi Sports Club Committee.

4. The Cup shall become the property of any competitor who wins the competition three years in succession.

5. A miniature Cup shall be presented each year to the winner.

6. In the event of any dispute arising, the matter shall be referred to the Upasi Sports Club Committee, whose decision shall be final.

CLUB BADGE.—Ladies' Competition.

The judging has now been completed by the Club Committee.

Miss A. M. Weld Downing is the winner and her prize will be presented to her during Planters' Week.

The question of whether any of the designs sent in are suitable for the Club badge is being left over for decision at the Annual General Meeting to be held on February 23 at Ootacamund.

'WINDLE' LADIES' GOLF CUP.—Will be played for on Monday and Tuesday, February 22 and 23.

RUGBY FOOTBALL 'CARVER' CUP.—Permission for playing on the Wellington Gymkhana Ground has been given to us, and the Committee of this Club has been thanked accordingly. This permission has been given in spite of our dates happening to clash with Wellington Polo days, and the kindness shown to us will be much appreciated by all members of the Club.

The districts already entered will wear colours as under :—

ANAMALAIS	Their own.
KANAN DEVANS	Green and Gold.
WYNAAD	White.

Drinks at Wellington will be obtained on cash payment only, and players and spectators are warned to take money with them on the two Rugger evenings.

The DRAW will take place in Madras on January 25 and will be done by Mr. Waddington and the donor of the Cup, Mr. Carver Marsh.

G. W. FULCHER,
Honorary Secretary.

January 15, 1926.

EXPORTS OF TEA, COFFEE & RUBBER FROM SOUTH INDIAN PORTS DURING NOVEMBER, 1925

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Tea—</i>								
Madras	336	...	124,315	70	1,500	...	...	...
Calicut	29,502	38,765	1,565,117	...	480	...	10,300	...
Cochin	8,716	85,852	769,168	...	...	1,675	...	...
Mangalore	1,500	...	6,364	...	...	...	...	...
Tellicherry	...	...	127,759	...	...	...	...	...
Tuticorin	...	169,011	1,895,121	...	...	...	...	...
Alleppey	101	57,869	81,248	...	...	...	...	...
Total	40,155	351,479	4,569,092	70	1,980	1,675	10,300	...
Previously	227,126	2,340,450	20,580,461	1,058,271	6,600	2,970	54,853	1,850
Total lbs. since 1-1-25.	267,281	2,691,947	25,149,553	1,058,341	8,580	4,645	65,153	1,850
<i>Coffee—</i>								
Madras	536	...	...	...	12	...	...	1
Calicut	...	...	...	300	3	...	...	...
Cochin	...	...	761	...	...	...	...	...
Mangalore	282	...	132	3,541	270	...	...	...
Tellicherry	...	...	100	207	...	...	...	...
Bombay	...	...	...	...	150	...	...	...
Total	818	1	993	4,048	435	...	...	1
Previously	16,556	34	112,240	109,225	29,704	1	503	7,832
Total cwts. since 1-1-25.	17,374	35	113,233	113,273	30,139	1	503	7,833
<i>Rubber—</i>								
Calicut	...	58,046	145,350	...	...	...	...	...
Cochin	...	385,070	470,438	2,200	...	...	141,000	...
Mangalore	...	24,593	...	...	...	...	...	...
Tellicherry	...	1,323	15,460	...	...	...	...	...
Tuticorin	...	43,861	3,492	...	...	...	...	...
Alleppey	...	359,005	28,500	10,050	...	11,200	22,400	...
Total	...	871,898	663,240	12,250	...	11,200	163,400	...
Previously	3,170	4,705,324	4,330,521	158,349	1,463	14,494	1,418,736	...
Total lbs. since 1-1-25.	3,170	5,577,222	4,993,761	170,599	1,463	25,694	1,582,136	...

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending January 16th, 1926

Bank Selling Demand Draft on London

11th	12th	13th	14th	15th	16th
18 5/32d.	18 5/32d.	Holiday	Holiday	18 5/32d.	18 5/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending December 19, 1925	January 1 to December 19, 1925	January 1 to December 19, 1924
TEA (WEEK ENDING DECEMBER 19, 1925)		s. d.		s. d.	s. d.	s. d.
(a) <i>Anamallais</i> —			N. India.	1 8.45	1 5.68	1 7.92
Kallyar ... 100	1	8 $\frac{3}{4}$	S. India **1	8.65	††1 5.62	††1 7.02
Pannimade ... 90	1	8 $\frac{1}{4}$	Ceylon...	1 10.76	1 8.09	1 8.77
Pachaimallai ... 68	1	8 $\frac{1}{4}$	Java ...	1 4.56	1 0.83	1 3.46
Karakundru ... 114	1	7	Sumatra.	1 8.22	1 4.56	1 5.90
			Nyassa-land.	1 2.28	1 1.24	1 4.57
			Total ...	*1 8.90	†1 6.05	†1 7.79
(b) <i>Central Travancore</i>						
Cheenthalar ... 113	1	7 $\frac{3}{4}$				
Pirmed ... 163	1	7 $\frac{1}{2}$				
Karimkolam ... 150	1	7 $\frac{1}{2}$				
Twyford and Ashley. 132	1	7 $\frac{1}{2}$				
Haileburyia ... 287	1	7 $\frac{1}{4}$				
Maimallai ... 90	1	6				
(c) <i>Kanen Devans</i> —						
Kalaar ... 126	1	9 $\frac{3}{4}$				
Nettigudi ... 117	1	9 $\frac{3}{4}$				
Nullatanni ... 225	1	8 $\frac{3}{4}$				
Pulivassal ... 240	1	8				
(d) <i>Nilgiris</i> —						
Ibex Lodge ... 47	2	1				
(e) <i>Nilgiri-Wynaad</i> —						
New Hope ... 47	1	6 $\frac{1}{4}$				

(b) SPECIAL COFFEE CABLE

LONDON, JANUARY 20, 1926

'A' COFFEE

145s. PER CWT.

MARKET FIRM

** Based on 5,516 packages.

†† " " 180,941 "

†† " " 132,182 "

* Based on 71,250 packages.

† " " 3,136,210 "

† " " 2,921,434 "

(c) *Précis of reports on London Markets received on January 18, and covering the week ending Saturday, December 26 :—*

(1) *Tea.* There were no auctions during the week under review ; and consequently on the previous page we can only reproduce the previous week's averages and give fresh selections from the prices which individual parcels obtained. The market continued firm for private sales.

(2) *Rubber.* The week under review saw the prices for 'Spot', January-March, and April-June deliveries down respectively to 3/8d., 3/5d., and 3/2d.; which were lower by 5d., 5¼d., and 5¾d., than the prices which we quoted on this page last week. The continued fall in the price is attributable to a falling off in demand, coupled with an increase in supply caused by the liquidations of speculators and the sellings of market operators who created a considerable 'bear' account. Stocks at the beginning of the week under review amounted to 5,402 tons as against 29,758 tons a year before.

(3) *Coffee.* No auctions were held during the week under report ; but private sales indicated that the market remained quite quiet and that prices showed little, if any, change.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, January 16, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	N.R.	92·85	N.R.	19. Coonoor ...	1·00	73·51	74·51
2. *Tenmalai.	0·17	99·94	100·11	20. Kotagiri ...	0·40	61·88	62·28
3. Mundakayam.	0·00	156·01	156·01	21. Ootacamund	0·00	49·18	49·18
4. *Peermade.	0·00	173·25	173·25	22. Yercaud ...	N.R.	51·35	N.R.
5. Twyford ...	N.R.	201·99	N.R.	23. Devala ...	N.R.	131·66	N.R.
6. V'periyar ...	0·00	80·73	80·73	24. Gudalur ...	0·00	74·30	74·30
7. Kalaar ...	0·00	212·03	212·03	25. CALICUT ...	0·00	134·52	134·52
8. Chittuvurrai	0·00	59·08	59·08	26. Kuttiyadi ...	0·00	178·34	178·34
9. BODI'KANUR	0·06	25·92	25·98	27. Vayittiri ...	0·00	160·06	160·06
10. COCHIN ...	0·00	110·41	110·41	28. Manantoddi.	0·00	110·85	110·85
11. *Mooply ...	0·00	113·88	113·88	29. Billigiris ...	0·00	65·60	65·60
12. Mooply Valley	0·00	125·05	125·05	30. *Sidapur ...	0·00	74·44	74·44
13. Pachaimalai	0·00	123·94	123·94	31. Pollibetta ...	N.R.	N.R.	N.R.
14. Mudis ...	N.R.	202·49	N.R.	32. Somwarpett	0·00	85·96	85·96
15. POLLACHIE.	0·00	30·02	30·02	33. Ballupete ...	0·00	76·01	76·01
16. Manjeri ...	0·00	125·76	125·76	34. MANGALORE.	0·00	139·39	139·39
17. Nilambur ...	0·00	101·11	101·11	35. MADRAS ...	0·15	62·24	62·39
18. Naduvattam	0·00	83·84	83·84				

W = During the week.

P = Previously.

N.R. = No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 5] SAT., JANUARY 30, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	65	Letters to Editor—	
A Rubber Causerie ...	66	Seven A Side Rugby ...	75
The late Messrs. Frank Mangles and George Pearse ...	68	Export of Indigenous Manures ...	77
Rubber Supply and Demand ...	69	Motor Mileage ...	78
Leaf Diseases of Hevea ...	70	South Coorg Notes ...	78
Nilgiri-Wynaad P.A. Meeting. ...	71	Commercial and Meteorologi- cal ...	79
U.P.A.S.I. Sports Club ...	74		

EDITORIAL NOTES

We understand that the first meeting of the Committee which has been appointed by the Government of Madras to consider amendments to the Planters Labour Act will be held on Monday, February 8th, after the Legislative Council Meeting on that day. The personnel of the Committee was given on page 50 of our issue of last week.

*The Madras
Planters Labour
Act*

Sir Ganga Ram, K.T., C.I.E., M.V.O., R.B., has recently handed over to the Punjab Government Rs. 25,000 for the endowment of a prize to be awarded 'for a discovery, or an invention, or a new practical method which will tend to increase agricultural production in the Punjab on a paying basis.'

*Agricultural
Development
Prize*

The Prize will be awarded every three years provided a satisfactory achievement is reported to the Managing Committee; which consists of the Vice-Chancellor of the Punjab University; the Agricultural Adviser to the Government of India; the Registrar of Co-operative Societies, Punjab; Sir Ganga Ram; Sir John Maynard; and the Director of Agriculture,

Punjab (Convener and Secretary). The competition is open to the world, and the applications for the first award about Rs. 3,000 should reach the Director of Agriculture, Punjab, by January 1, 1929.

Few of those who slog away year after year at some problem which is baffling human progress ever achieve fame. Even fewer achieve it while they are alive; for perhaps the most honoured of posterity are those who were most maligned in their own time. Infinitely fewer still must be the number of brothers who during their lives have achieved recognition as pioneers. From the planting standpoint the Rosses are a peculiarly pertinent case in point. Sir Ronald is now reconnoitering in Ceylon. Dr. Halford Ross, his brother and associate in exposing the iniquities of the Anopheles, has been granted long leave of absence by the Home Secretary from his substantive duties as the London Medical Officer for Workshops and Factories; and is *en route* to Assam to formulate a plan of attack against those literal and metaphorical bêtes noires of which he and his brother are the sworn foes. We are sure that Assam will extend to the Doctor a welcome second only to that which Sir Ronald is now receiving in Ceylon.

Dr. O. W. Willcox, writing in the New York *Tea and Coffee Trade Journal* suggests that Firestone could be a stone which would kill two birds—the Brazilian Coffee, as well as the Eastern Rubber, monopolies—provided he profits by the experience of the Dutch in Java who are finding that Rubber *cum* Coffee pays better than either Coffee alone or Rubber alone. For years of course the Dutch have inter-planted Coffee with their Rubber; allowing it eventually to be crowded out by the slower growing rubber after it (the coffee) had yielded on an average about 600 lbs. per acre for twelve to fifteen years. Dr. Willcox however claims that there is now a well-defined tendency to reverse the position of the two cultures; making Coffee the primary, and Rubber the secondary, crop.

A RUBBER CAUSERIE

Reuter of late has been prodigal with cables recounting the activities of those interested in Rubber in the U.S.A. Singularly enough Mr. A. L. Viles, the General Manager of the Rubber Growers' Association of America, when putting the case of the American Manufacturers before the Rubber Committee of the House of Representatives (which concluded its investigations last week) and condemning the Stevenson Scheme in the orthodox fashion, does not seem to have obtained a particularly good Press. *The New York Times* for example protests against the glaring inconsistency of the American Government in objecting to the Stevenson Scheme when it had officially advised American Wheat Growers and Cuban Sugar Planters to restrict production and thus keep prices artificially high. *The New York World* accuses Mr. Hoover of carefully ignoring the fact that the price of rubber is as high in Britain as it is in the U.S.A. Even on the Rubber Committee itself Mr. A. L. Viles had by no means things all his own way. Mr. Black, one of the members, stated that the increase in the price of tyres could not be justified by the cost of crude rubber, but that the manufacturers were hypocritically barking at the East Indian Rubber Planter because they wanted 'an alibi to gouge the public'. He declared that after three years'

Rubber Restriction the Firestone Rubber Company made a profit of £2,600,000 in 1925 against one of £250,000 in 1921; and that the Goodrich Company made £140,000 profit in 1925 against £5,000,000 loss five years before. It would therefore appear that one finding of the Rubber Committee of the House of Representatives will quite likely be that the Stevenson Scheme incidentally provided manufacturers with a convenient scapegoat in the shape of the Eastern Producer when the consuming public raised an outcry against the prohibitive retail price of rubber goods. President Coolidge apparently takes a more impartial view of the situation than Mr. Hoover, his Secretary for Commerce; for he is reported to have declared that there is no occasion for a Government subsidy of rubber development schemes since the interests concerned have themselves ample funds for the purpose at their command. These development schemes have it transpires other sponsors besides Mr. Firestone, for the Automobile Chamber of Commerce is raising \$10,000,000 to purchase estates in Brazil, Ceylon, Kenya, Columbia and Cuba; while the Rubber Association of America is allotting \$10,000,000 annually for 5 years to plant rubber in the Dutch East Indies and the Phillipines.

We gather that the Russian Soviet is, like the U.S.A., bent on undermining the supremacy of Britain as a rubber producer and has opened up Experimental Plantations in Transcaucasia and Turkistan. The manufactured rubber outturn of the Soviet Union is now about 60 per cent (as against only 5 per cent in 1920) of the pre-war output, which it is confidentially expected to overtake about the middle of next year. To cope with this expansion it appears that orders for machinery for the replacement of existing, and the equipment of new, Plants have been placed in the United States, England, France, and Germany to the extent of some £500,000.

The likelihood of increasing demand from Russia in particular and other consuming countries in general will be noted with satisfaction by Producers, whose position will of course remain for many years unaffected by any new clearings which their would-be rivals may successfully open up. The fact that 'Spot' rubber has declined about 40 per cent in value within the last five or six weeks and is now only about 2s. 10d. has not shaken our conviction that satisfactorily high prices are assured for several years to come. We note that the well-known Mincing Lane Broker Mr. J. E. Williams endorsed this opinion in Colombo last week when he stated in an interview that he was confident that the average price of rubber would be at least 3s. for the next six years.

A set back in price was only to be expected as an outcome of the customary seasonal unloading prior to the end of the year, and the fall was doubtless accentuated by the nervousness of the get-rich-quick speculators and by the mid-winter lessening in the demand for Spot in America where the December consumption was less than the November consumption by 7,000 tons. We expect in due course a recovery equivalent to the extent to which seasonal financial stringency and lessening demand were responsible for the decline of the last few weeks. Such decline of course as was caused by the withdrawal of nervous bulls will in all probability be a permanency until the bulls regain courage sufficiently to come butting in again; but we cannot deem it a disadvantage if the price does not rise appreciably higher than the level indicated by the economic relation subsisting between supply and demand.

THE LATE MR. FRANK MANGLES

(FROM A CORRESPONDENT)

Died at Shalden Lodge, Alton, Hants. Aged 86. December 17, 1925. Few planters now in India can remember Frank Mangles: he belonged to what is fast becoming the legendary age of coffee planting. After a time at the India Office he came to Coorg in 1863, and opened the estates of what is still known as 'Mangles Bros.' A pioneer and a sportsman, he endeared himself to all by his strong yet genial character. He was a good shot and also kept hounds at Hallery for some years, afterwards becoming a member of the Periapatam Hunt. He retired in 1883, and only once again visited India, in 1896. He was an Honorary Magistrate for Coorg, and represented the Upasi on the London Chamber of Commerce in 1896-7. On the death of his brother, Harry Mangles in 1908, he became Manager in England till 1915, when he retired in favour of Mr. W. H. Sprott. He retained a marvellous memory of every detail of the estates till the end, and loved to talk about them to his Coorg visitors in England. In 1890 he was appointed a J.P. for Surrey and sat on the Farnham Bench. Nine years later he was made a Magistrate for Hampshire. Since 1893 he had been a Member of the Hampshire Hunt, and followed the hounds until he was 76 years of age. Both in India and England, as planter and sportsman, and in his devotion to public duties, he was an example of the Englishman at his best. The sympathy of all goes out to his friends and relations and especially to his only son, Col. Cecil Mangles.

THE LATE MR. GEORGE PEARSE

(FROM A CORRESPONDENT)

Died at Mercara, Coorg. Aged 63. January 9, 1926. George Pearse came to Coorg about 40 years ago and worked on Balacadoo Estate, belonging to his brother-in-law Mr. Macpherson, for some years. In 1900 he joined 'Mangles Bros.' afterwards becoming Manager. From the first he proved himself a leader of men, and a succession of young men coming out owed more to his example and influence and his thorough though unobtrusive teaching, both in work and play, than they could ever repay. In his earlier days, especially, he excelled at most games, was a keen rider and a good shot, both with gun and rifle. He was also a keen volunteer and won the Madras Presidency Medal for rifle shooting. He commanded the Coorg and Mysore Rifles for some years. He re-started golf in Coorg, and founded the Belur Club, which for the first few years he maintained at his own expense. He always kept up the old fashion of open house to all; and few, if any, of either residents or visitors to Coorg but have experienced the delightful and open-handed hospitality of Mr. and Mrs. Pearse. He was a prominent member of the Coorg Planters' Association, and a President of the North Coorg Club and his steadying influence and sound advice was always at the service of all. He suffered of late years from some ill-health, and the 'slings and arrows' of fortune. But his wonderfully noble and patient nature bore it all almost in silence, and never altered the warmth and geniality of his presence. He leaves a gap in Coorg and in the hearts of troops of admiring friends that will endure during the life-time of them all. The deepest sympathy is felt for Mrs. Pearse and for his sisters and brothers.

RUBBER SUPPLY AND DEMAND

Mr. Eric Miller's Views

(Concluded from Page 53, Issue of January 23, 1926)

NEW PLANTING

Meanwhile, the well-organized and proven plantations in the East are quietly but definitely adding extensions to their present planted areas, using first-class planting material, and I am sure that these extensions will prove to be a very sound investment. British predominance has not diminished in any sense as a result of the legislation regulating exports from Malaya and Ceylon, and all my inquiries convince me, as I have repeatedly stated during recent years, that the estates which have been restricting exports under legislation or voluntarily are in excellent condition to derive the maximum benefit from the period of prosperity which may be looked for during the next few years.

FORECAST FOR 1926

It is difficult at this stage to estimate, with any degree of accuracy, what the production during 1926 is likely to be. The labour question has a distinct bearing on this, and, although there is no doubt that all the labour necessary for production of full normal crops will be arranged for in the course of next year by those estates which have not already done so, it is doubtful whether a full complement of trained labour is actually available at the present time to secure full crops in the last quarter of the year, when the trees give their maximum yield. In view of the seasonal nature of the tyre trade, I do not look for any material increase in the free stocks of crude rubber until about the middle of next year, by which time the production of rubber will be at full capacity. 'Full capacity' is a somewhat elastic term. It is to be anticipated, however, that producers generally will refrain from indulging in the too drastic system of tapping which was in vogue prior to the slump, and that greater regard will be paid to the maintenance of adequate bark reserves—a matter which is of the utmost importance when taking into consideration the potential normal increase in the world's requirements.

MANUFACTURERS' LARGER STOCKS

Manufacturers should make the necessary financial arrangements to carry larger stocks of crude rubber when these again become available. Nothing would be more disastrous from their point of view than for them to repeat the mistake of neglecting the market when supplies are freely available. Between the low level of recent years and the present higher prices there is a happy mean at which producers, manufacturers and consumers alike would be glad to see the market stabilized; but to get anywhere that ideal, manufacturers will have to do their full share. It requires considerable strength of mind to buy anything on a falling market and that is the time when the test will come as to whether the lessons of the past two years have been learnt or not.

Present stocks would represent less than $3\frac{1}{2}$ months current absorption. Under normal conditions comfortable working stocks should be the equivalent of about six months absorption. It is only a matter of time until we reach the point when the annual increase in production will be less than the annual increase in absorption, and, provided a steady and far-sighted view of the position is maintained, any excess of production over absorption in the meantime could be, and should be, carried without difficulty.

LEAF DISEASES OF HEVEA

BY

CHARLES HERBERT WRIGHT, B.A.

We reproduce with due acknowledgments, the following article which was specially prepared for the *Indian Rubber Journal* by Mr. Wright :—

INTRODUCTION

The writer proposes to discuss the significance of the diseases of the Hevea leaves and fruits (capsules or pods). Judging from the general attitude adopted towards the question of leaf disease, one would infer that at present there were no serious diseases calling for attention. But in actual fact this is far from being the case.

It is much to be regretted that the deciduous nature of Hevea has led to a false impression in the minds of some that the disease factor is suppressed by the annual leaf fall. It is incorrect to assume that because the diseased leaves are shed the disease is itself thrown off.

On the contrary, the individual trees do not winter simultaneously. Some trees may be quite bare, while others have either produced new leaves or have yet to 'winter.' Thus, the disease cycle is continued, infection of the recently produced foliage resulting from trees still in possession of the previous year's leaves. Again, certain leaf diseases may affect the twigs, etc., of the branches which bore them, the hyphæ growing up again through the leaf stalks and causing a secondary leaf fall. The spores produced from the hyphæ in the fallen leaves have also to be taken into consideration, thus constituting a third source of infection.

It should therefore be realized that Hevea can be crippled to the same extent by leaf disease as any other perennial, and that a repetition of an epidemic comparable to that of *Hemileia vastatrix*, which resulted in the devastation of the coffee areas in Ceylon towards the close of last century, is highly probable if the question of control is not taken in hand.

In South America the leaf disease caused by *Fusicladium macrosporum* has already led to the abandonment of large areas of rubber, because people have failed to realize the significance and potentialities of a serious leaf epidemic.

The exhaustive effect on the tree, occasioned by abnormal leaf falls, must lead to its ultimate death.

THE LEAF DISEASES OF HEVEA

A distinction must be made at the outset between the fungi causing leaf and fruit disease of Hevea, which are known to occur in the Eastern and Western Tropics respectively.

The leaf diseases of Hevea are due to the incidence of the following fungi:—*Catacauma Huberi*, *Fusicladium macrosporum*, *Scollcotrichum Heveæ*—*Phytophthora Faberi* and *Meadii*, *Glœosporium alborubrum*, *Oidium* sp.—*Helminthosporium Heveæ*, *Phyllosticta Heveæ*, *Ascochyta Heveæ*, *Guignardia Heveæ* (*Sphærella Heveæ*), Sooty moulds and *Aschersonia*, Thread and Horse Hair blights, and the red alga *Cephaleuros parasiticus*.

With the exception of the first three, recorded from South America, the above have been known to occur in the tropical zones of the East.

Abnormal leaf fall is occasioned by *Phytophthora*, *Gloeosporium*, and *Oidium*, the first two also being responsible for pod rot. The spotting and blotching of the leaves is caused by *Helminthosporium* (Bird's Eye spot) and *Phyllosticta*; it should be mentioned that many other fungi are known to occur in the spotted areas of dead tissue, but the majority are in the main saprophytic following in the wake of the parasitic—organism—a common phenomenon in plant pathology.

The rim blights include *Ascochyta Heveæ*, *Guignardia Heveæ*, *Sphærella Heveæ*, their presence being heralded by the dying back of the leaf margins producing a rimming effect. It is often easy to confuse the black patches produced on the leaves by Sooty moulds (*Meliola*, *Chaetopeltopsis*, etc.), with an attack of *Phytophthora*, but the former are superficial, living on the secretions of scale insects and the 'extra-floral' nectaries of the leaves; like *Oidium* they are superficial, but unlike *Oidium*, which produces *Laustoria*, penetrating the epidermal cells, they are comparatively innocuous. *Aschersonia* is another fungus, apart from the Sooty moulds, which parasitises scale insects.

The thread blights include both epyphytic and parasitic forms, while *Marasmius equicrinis* (horse-hair blight) spreads over the leaves in an epiphytic manner. Red rust, occasioned by *Cephaleuros*, is rare, attacking trees when in a very poor state of health, and is easily thrown off by improved cultivation.

The chief sources of danger are at present to be found in the fungi in the producing abnormal leaf fall. The significance of *Phytophthora* is twofold, as the spores are washed down the trunk of the tree from the diseased leaves and decaying pods, *P. Meadii* causing Black Stripe of the tapping surface and *P. Faberi* the patch or claret-coloured canker.

(To be concluded next week).

DISTRICT ASSOCIATION MEETING NILGIRI-WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of a General Meeting of the above Association held at Gudalur
at 11 a.m. on Monday, January 11, 1926.

Present

Messrs. P. A. Naylor (*Chairman*), W. K. Baillie, J. M. McBride, J. C. Nicolls, M. J. Wright, J. W. G. Bisset, J. S. Nicolls, R. M. Nicolls, R. Fowke, J. C. Blackham, G. W. Fulcher, J. Aird, C. E. Crawford Walker, F. Farmer, F. C. Scott, and D. Mackintosh (*Honorary Secretary*).

Visitors

Messrs. A. Scott-Hart, C. O. Commin and E. M. Geddes.

THE PROCEEDINGS OF THE LAST MEETING WERE TAKEN AS READ.

COIMBATORE LABOUR CONTROL.—Read letter from the Honorary Secretary, Annamallai Planters' Association, *re* the payment of Head Money (Commission) to Estate Gang Coolies. The Honorary Secretary was instructed to write and ascertain their (The Annamallai Planters' Association) definition, of an 'Advanced Coolie'.

Labour Department.—Read letter from Major Brock, *re* the Propaganda Work being done in this District.

The Honorary Secretary was instructed to write to Major Brock ; and point out that this Association did not want to know what had been done some months ago, but wanted to know what has been done at the present time.

Member-in-Waiting.—Mr. J. S. Nicolls, who is going Home on leave, tendered his resignation as Active Member ; and Mr. F. Farmer, Member-in-Waiting takes his place. Mr. F. C. Scott was elected Member-in-Waiting in place of Mr. Farmer.

MYSORE LABOUR CONTROL.—Our Delegate (Mr. J. AIRD) answered all the questions put to him and said that he would furnish each Member with a copy of the Report.

LABOUR DEPARTMENT.—*Provident Fund for Indian Employees.*—Major Brock's letter of January 5, was read, and the Meeting was unanimously of the opinion that matters of this kind should be left to Members of the Control Committee to deal with.

Passages to wives of European Employees.—Read letter from Major Brock, of October 23 last. The Honorary Secretary was instructed to reply as follows :—

That our Control Committee Members will voice their opinion when the matter comes up for discussion at the next General Control Committee Meeting.

WYNAAD RE-SETTLEMENT SURVEY.—This matter was fully discussed and when Members send in their Cheques, they should do so under protest. The following resolution proposed by Mr. G. W. Fulcher and seconded by Mr. J. S. Nicolls, was carried unanimously :—

Resolved that the question of re-settlement charges be referred to the Wynaad Planters' Association, asking that Joint Legal opinion be taken on behalf of the two Associations.

Also Resolved (proposed from the chair and carried unanimously) that this Association agree to pay half the cost of the Legal opinion obtained jointly by this and the Wynaad Planters' Association in connection with the Government re-settlement survey charges levied in the Wynaad.

SOUTH INDIA PLANTERS' BENEVOLENT FUND.—The Honorary Secretary was instructed to approach, Firms, Companies, and Personal Members to contribute to this fund. A subscription list was handed round the room, and Rs. 130 promised.

AN ACT TO REGULATE THE MUTUAL OBLIGATIONS BETWEEN EMPLOYER AND WORKMAN IN PLACE OF ACT XIII OF 1859 REPEALED.—This matter was fully discussed and Mr. R. Fowke proposed and Mr. J. C. Blackham seconded that Mr. J. Aird should be appointed this Association Delegate, which was carried unanimously.

Our Delegate was duly instructed as to what steps to take in the matter.

GUDALUR COURT.—Mr. D. Mackintosh brought to the notice of the Meeting the unnecessary delays caused in disposing of cases in this Court. In his instance, himself and witnesses attended the Court five times and on the sixth occasion the case was partly tried and again adjourned. The Honorary

Secretary was instructed to report the matter to the District Magistrate, The Nilgiris. The Honorary Secretary was also instructed to request the Tahsildar to circularize Estates, when he was out on tour in the District, as in many instances Members of this Association had to travel long distances to the Court, and on arrival there were informed that the Tahsildar was out on tour.

NILGIRI DISTRICT BOARD ENGINEER.—Read correspondence between Mr. J. S. Nicolls and the Board Engineer. The Meeting was unanimously of the opinion that the Engineer should immediately withdraw his endorsement of the statements made in the report by the Gudalur Local Fund Overseer, his objection to the implied use of the District Board monies for other than the right purposes, was so strong, that an apology for forwarding the letter of December 13, 1925, to Mr. Nicolls was asked for, through the Honorary Secretary of this Association.

NELLACOTTA-SULTAN'S BATTERY ROAD.—Read letter from the Honorary Secretary, Wynaad Planters' Association, stating that their District Board Member would do what he could to get the Malabar District Board to push on with the repairs, etc., of this road.

U.P.A.S.I. SPORTS CLUB.—Mr. G. W. Fulcher (the Honorary Secretary of this Club) informed the Meeting that the following Gentlemen had been chosen to represent the District in:—

Tennis. Messrs. F. C. Scott and E. M. Geddes.

Golf. Will be notified later.

Rugby. A Team against the Kanaan Devons and the Annamallai, for the 'Carver Cup', had been got up between the Wynaad and this Association.

NEW MEMBERS.—(Estates) Terrace Estate, Naduvattam P.O.

(Personal) (1) A. Scott-Hart, (2) J. H. Will, (3) C. O. Commin, (4) J. F. Smail and (5) E. M. Geddes. The above named were unanimously elected Members of this Association.

COORG PLANTERS' ASSOCIATION. *Letter re Absconding Coolies.*—Was read and the matter referred to this Association Committee.

ALTERATION OF THE ARTICLES OF THIS ASSOCIATION.—Mr. Waddington's letter of December 19 last was read and the Honorary Secretary instructed to call an Extraordinary General Meeting at an early date.

CUTTING OF CURRENCY NOTES.—It was proposed that if the alteration is made in the rules, this Association would suggest the Upasi press for Insured parcels to be delivered at the Office of the addressee by the Post Office authorities instead of as at present. Despite Insurance we have to take the risk of a Tappal Coolie being molested and money stolen *en route* from the Post Office to the Estate office.

ESTATE LAW AGENTS.—This matter was fully discussed and the Honorary Secretary was instructed to obtain figures from Members who had not yet supplied them.

GENERAL.—Proposed by J. S. Nicolls, Esq., and seconded by R. Fowke, Esq., that urgent matters should be referred to the Association's Committee and that they in turn should deal with the subject, and report their actions at General Meetings.

D. MACKINTOSH,
Honorary Secretary.

P. A. NAYLOR,
Chairman.

U. P. A. S. I. SPORTS CLUB

Planters' Week, 1926

GOLF—'WINDLE'S LADIES' CUP'—Open singles.

Previous notices are cancelled.

Conditions will be as under:—

Open to members of families of members of Sports Club.

1st round qualifying, medal play—15 holes.

Pairs will be drawn for.

Entries 8 or over—4 best scores qualify.

Do. under 8—2 do. do.

The semi-final and final-match play—18 holes.

Play will be from Ladies' tees except at 16th and 18th holes where there are none.

The competition to be played under O.G.C. Local Rules.

Additions to Programme

'VETERANS' TENNIS CUP—

Sunday and Monday, February 21 and 22.

WINDLE' LADIES' GOLF CUP—

Monday and Tuesday, February 22 and 23.

'PINCHES' MEN'S GOLF CUP—

Monday and Tuesday, February 22 and 23.

NOTE.—Mr. Pinches has yet to make his conditions, but I understand they will be the same as those above for the Ladies' Cup, except as regards the number of holes to be played.

Rugby Football 'Carver' Cup

DATES—As no objection will be raised to one of the games being played on Sunday, February 21, and Saturday 20, being a polo day at Wellington, the two evenings for play have been fixed for February 21 and 22.

Kick Off 5 p.m.

THE DRAW—Was made by Messrs. G. A. Marsh and Waddington on the 25th instant with the following result:—

<i>February 21</i>		<i>February 22</i>	
ANAMALAIS	}	WINNER OF FEBRUARY 21, 1926	}
<i>vs.</i>		<i>vs.</i>	
WYNAAD		KANAN DEVANS (BYE).	

RUGGER DINNER—It will not be possible for the Ooty Club Staff to have the dinner on the Monday owing to there being the Woodside Subscription Dance the same night. Should sufficient Rugger men be able to stay over Tuesday, the dinner could be arranged that night.

I shall require a weeks' notice and would request Messrs. Hawkins and Cooper to inform me the number of players who could attend from High Range and Anamalais.

REFRESHMENTS—Will be obtainable at the Wellington Gymkhana by the purchase of Rs. 2 books.

January 23, 1926.

G. W. FULCHER,
Honorary Secretary.

LETTERS TO THE EDITOR

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

'Seven A Side Rugby'

SIR,

I send you a cutting (reproduced below. *Ed*) received by last Mail from a Home-paper. May I suggest your publishing the article in full in your paper? In most districts it is almost impossible to get two full Rugger-sides. Here there is a substitute countenanced by the Powers that be—which requires only 14 men and would be the means of keeping the fellows in training and familiarizing them with the Rugger-ball for the M. C. C. Tournament.

SALLEBILE ESTATE,

MYSORE STATE,

January 20, 1926.

Yours, etc.,

N. C. WHITTON.

Novel Competition in Aid of Middlesex Hospital

BY

DR. J. A. RUSSELL-CARGILL

On April 24 there is to be played at Twickenham, the beautiful enclosure and G.H.Q. of the Rugby Union, a novel competition as regards the South of England. It is no less than the seven-a-side 'knockout' Rugby competition that is such a favourite pastime with our friends 'ayont the Tweed.' The competition was originally planned to take place on the last Saturday of the season, but, as many of our clubs had important fixtures on that date, the 'parent body' was approached, and gave the necessary permission to play the finals in the 'close' season, thereby enabling all clubs affiliated to the Middlesex County Union to take part in the competition. All the takings, after expenses have been deducted, are to be handed over to the Middlesex Hospital Restoration Fund, and it is hoped that this most deserving charity will benefit to a very large extent. I am indebted to Mr. W. M. Henderson, Hon. Secretary of the Melrose R.F.C., for much information and guidance as to how best to run the competition. Melrose Club's field is situated in a lovely part of the Borderland of Scotland, the home of Sir Walter Scott, and the birth-place of much of Scottish romantic history. Once a year their beautiful ground is the 'Mecca' of seven-a-side enthusiasts, and although Melrose is only a small country town, crowds of 10,000 turn out to see these most exciting contests. Melrose is a very go-ahead club, and I think I am right in saying that they were the first club in the country to run a regular annual competition of this kind; last year was the 39th of the series, interrupted, as was all Rugby Union football, by the war. For years on end the competition was invariably won by the clever and robust Border town 'Sevens,' and many a City seven, composed as they sometimes were, of International players in toto, 'set its cap' at the elusive Championship, only to be once more rebuffed. It was not until the then all-conquering Watsonians really set out to do the trick in 1905, that the

CHAMPIONSHIP EVENTUALLY WENT NORTH

to one of the Cities; this the result of hard and thoughtful practice together

for some weeks prior to the competition. Since the spell was broken, the Championship has been more or less equally distributed between Border and City teams. All the other Border clubs, Hawick, Jedforest, Gala, Kelso, etc., now run their own competitions, which are largely patronized, and in Edinburgh the game has become vastly popular, a crowd of nearly 20,000 being present at Inverleith on one occasion since the war. The younger clubs will see by the foregoing that it is not necessarily the team of so-called 'stars' that gets off with the honours at this game, and they need have no hesitation in entering sides. Who knows? Some of our younger clubs may add glory and renown to their organizations, in this, the first seven-a-side competition to be held in London. The usual formation is as follows:—

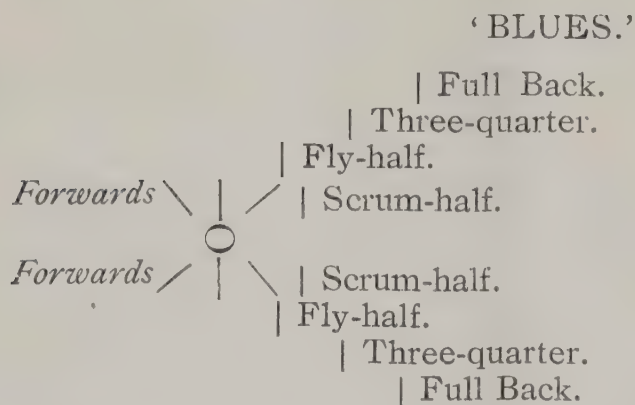
One full-back, who is often the fastest and cleverest man in the side.

One three-quarter, usually a fast moving centre, who can make openings and 'feed' the full-back.

Two half-backs—the usual scrum-half and fly-half; but a clever centre three-quarter can take the place of the latter, if more suitable to the team.

Three forwards, all of whom should be able to handle the ball like three-quarters, run like stags, and feed the backs, and one should, if possible, be able to combine 'lobbing' with these other attributes.

The diagram below will help to illustrate a frequent arrangement of the field:—



'WHITES.'

As will be seen from this diagram, the 'blind-side' game can be played to advantage by the 'fly-half' when near the opponent's goal-line, or when pressed on his own line. The cross-kick and all sorts of unusual tactics can be used to advantage by a clever seven, who will take the trouble beforehand to practise and pre-arrange some form of special strategy. But, you will say, this is surely a very fast game! It is—so fast that each round is limited to $7\frac{1}{2}$ minutes each way; 10 minutes each way being played in the 'final.' It certainly is a thrilling game, and the excitement rises to 'fever-point' by the time the final arrives, especially if two good players are pitted against each other.

THE EDITOR,
PLANTERS' CHRONICLE',
MADRAS.

Export of Indigenous Manures

SIR,

'G. N. Poonac' is perfectly right. The opponents of an export duty on indigenous manures are like the oysters in the tale, 'answer came there none'; though I would not presume to carry the analogy further, and compare myself to the walrus or the carpenter. If answers are to be of the calibre of 'G. N. Poonac's no doubt silence is best.

No one said it was a 'crime' to export manures, though the suicidal folly of allowing export in enormous quantities for the last fifty years almost amounts to criminal negligence. Surely, for agricultural purposes at least, India should be treated as a whole, and there is no analogy between e.g., exporting bones from Tinnevely to Coorg and from Tinnevely to Germany. There are enough indigenous manures in India to satisfy all districts, if export was restricted. Nor is there any analogy between the undeveloped tracts of N. Africa and America, and the agricultural parts of India; where the land has been worked out by hundreds and often thousands of years of cultivation. A recent paragraph in *The Madras Mail* shows that, whereas in average lbs. per acre of rice Spain produces 5,528 and Japan 3,014, India produces only 1,328, and is bottom of the list, except Java which produces 5 lbs. less.

As regards cyanamide and superphosphate 'G. N. Poonac' should read up a little more about manures. It is *organic* fertilizers that India needs; especially as her cattle manure is mostly of very poor quality and moreover is mostly used for fuel. With uncertain weather and sudden and torrential rains, very quick acting manures are often useless: moreover superphosphate is not suitable where, as is common in India, the soil is deficient in lime. At any rate the governments of countries like Germany, Japan, and the United States do not agree with 'G.N. Poonac'; as they eagerly buy all these organic manures and penalize India heavily if she tries to export vegetable oils without the poonacs. This statement that crushing the seed and exporting the oil does not pay is a mere assertion with nothing behind it, and is contradicted by the experience of other countries.

The question whether an export duty will make these manures more plentiful and reduce the price to the planter is an open one. We think it will. But we are prepared to take the risk in the interests of the ryot, who next to the consumer of tea and coffee, is the planter's best friend.

But so long as many planters are apathetic, the ryot ignorant, and the government sitting on the fence, it is to be feared that the 'Commercial Gentlemen' who for generations have made fortunes out of the trade, will successfully block any efforts at reform and improvement.

COWCOODY,
SOMWARPET,
January 24, 1926.

Yours, etc.,
L. NEWCOME.

THE EDITOR,
'THE PLANTERS' CHRONICLE',
MADRAS.

Motor Mileage

SIR,

In reply to the letter signed 'how is it done' in your issue of the 31st ultimo, the following are the detailed figures of running costs quoted by me.

				ES.	A.	P.
Oil and Sundries	...	...	...	42	8	9
Insurance premium	...	...	...	103	8	0
Cost of Petrol	...	...	...	537	12	5
Driver's Pay	...	...	...	744	0	0
Tyres and Tubes	...	...	...	519	15	6
Tolls and Batta	...	...	...	56	8	0
Repairs to Car	...	...	...	437	11	8
Total				2,442	0	4

Rs. 2,442-0-4 for 8,500 miles equals Rs. 0-4-7.16 per mile.

Depreciation is not entered in our running costs figures and I should imagine that these vary considerably, dependent on the roads and Driver.

POLLIBETTA,

S. COORG;

January 21, 1926.

Yours, etc.,

PERCY G. TIPPING.

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

Motor Mileage

SIR,

The only remark I have to make on Mr. Newcome's letter in your issue of 23rd is that he would be extraordinarily fortunate to obtain a driver at Rs. 30 per month inclusive of batta while in camp; and that if he will now add tolls to his mileage he will find that the total well exceeds his original 'fair and liberal' allowance of 6 annas per mile.

On the road I know best, tolls amount to Rs. 6 per 75 miles or say 0-1-3 per mile and there is a 1-toll at practically every twelfth mile throughout the largest recruiting district.

Yours, etc.,
'A. C'.

DISTRICT NOTES South Coorg

The following Cricketers will represent the South Coorg Gymkhana Club against the V'Rajpet Cricket Club at 1 p.m. on Sunday, January 31, on the Coorg Gymkhana Ground:—

K. A. Kuttappa.

B. A. Muttana.

R. Bentley.

B. I. Karambia.

W. L. Roberts.

R. B. Cunningham.

W. J. Mann.

H. Subbiah.

C. G. Ganapatty.

D. N. Pitcairn.

J. B. Reid.

I. K. Machiah (Reserve.)

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending January 23rd, 1926

Bank Selling Demand Draft on London

11th	12th	13th	14th	15th	16th
18 5/32d.	18 5/32d.	Holiday	Holiday	18 5/32d.	18 5/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending December 19, 1925	January 1 to December 19, 1925	January 1 to December 19, 1924
TEA (WEEK ENDING DECEMBER 19, 1925)		s. d.		s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 8.45	1 5.68	1 7.92
Sholayar ...	163	1 9½	S. India **1	8.65	††1 5.62	††1 7.02
Thayamudi ...	221	1 9¼	Ceylon...	1 10.76	1 8.09	1 8.77
Mukkottumudi ...	267	1 9	Java ...	1 4.56	1 0.83	1 3.46
Thonimudi ...	172	1 9	Sumatra.	1 8.22	1 4.56	1 5.90
(b) Central Travancore			Nyassa-land.	1 2.28	1 1.24	1 4.57
Stagbrook ...	56	1 9¾	Total ...	*1 8.90	†1 6.05	†1 7.79
Caradi Goody ...	97	1 9				
Glenmary ...	79	1 9				
Mount ...	134	1 8				
Dymock ...	102	1 7¾				
(c) Kanen Devans—						
Yallapatti ...	135	1 11¼				
Chockanad ...	139	1 11				
Periavurrai ...	160	1 10¾				
Sevenmally ...	113	1 10				
(d) Mundakayam—						
Yendayar ...	157	1 7				
(e) Nilgiris—						
Nonsuch ...	123	2* 1½				
Bhawani ...	123	1 11				
Prospect ...	70	1 11				
Craigmore ...	178	1 10				
(f) Nilgiri-Wynaad—						
Woodbriar ...	135	1 9				
Devarashola ...	201	1 8¾				
Seaforth ...	138	1 8¼				
Barwood ...	149	1 7				
(g) Wynaad—						
Chulika ...	75	1 6½				

(b) SPECIAL COFFEE CABLE

LONDON, JANUARY 27, 1926

'A' COFFEE

145s. PER CWT.

MARKET FIRM

** Based on 5,516 packages.

†† " " 180,941 "

†† " " 132,182 "

* Based on 71,250 packages.

† " " 3,136,210 "

† " " 2,921,434 "

(c) *Précis of reports on the London Markets received on January 25, and covering the week ending Saturday, January 2 :—*

(1) *Tea.*—The market remained closed for the Xmas Holidays, but 33,506 packages of Indian Tea were to be offered when auctions were resumed on Monday, January 4. At the few private sales which took place firm prices were realized for common and medium grades, but the price of the finer qualities showed a tendency to decline.

(2) *Rubber.*—Despite the considerable fall in the price of 'spot' during December, there was no despondency evidenced during the week under review, and the prospects for the New Year which it ushered in were considered to be extremely bright. It is of course possible (cf. the estimates on page 2 of our issue of January 2) that the 1926 crop will be sufficiently in excess of consumption to replenish slightly the present much depleted stocks, but no one anticipates the excess will be sufficiently great to warrant any severe attack on prices which it seems fairly evident will continue to give producers very handsome results.

(3) *Coffee.*—Auctions were not to reopen until Tuesday, January 5, and the indications were that good coffees would be in keen demand. Throughout 1925 there was more coffee on the market than was wanted; and consequently, with the exception of the finest Costo Ricas and Columbias, all grades tended to show a considerable falling off in price.

(d) *Précis of the latest Local Market reports :—*

(1) *Pepper.*—Mangalore reported on January 23 that despite reported stagnancy in the Home demand the local market was firm at about Rs. 18 per maund of 28½ lbs.

(2) *Coffee.*—The ruling price on the West Coast at the end of last week was from Rs. 83 to Rs. 87 per cwt. according to quality and grade.

(3) *Cardamoms.*—The market continues practically inactive, and the present price is about Rs. 55 to Rs. 65 per maund.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, January 23, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	0·00	92·85	92·85	19. Coonoor ...	0·00	74·51	74·51
2. *Tenmalai.	0·00	100·11	100·11	20. Kotagiri ...	0·00	62·28	62·28
3. Mundakayam.	0·00	156·01	156·01	21. Ootacamund	0·00	49·18	49·18
4. *Peermade.	0·00	173·25	173·25	22. Yercaud ...	0·00	51·35	51·35
5. Twyford ...	0·00	202·02	202·02	23. Devala ...	N.R.	131·66	N.R.
6. V'periyar ...	0·00	80·73	80·73	24. Gudalur ...	0·00	74·30	74·30
7. Kalaar ...	0·00	212·03	212·03	25. CALICUT ...	0·00	134·52	134·52
8. Chittuvurrai	0·00	59·08	59·08	26. Kuttiyadi ...	0·00	178·34	178·34
9. BODI'KANUR	0·00	25·98	25·98	27. Vayittiri ...	0·00	160·06	160·06
10. COCHIN ...	0·00	110·41	110·41	28. Manantoddi.	0·00	110·85	110·85
11. *Mooply ...	0·00	113·88	113·88	29. Billigiris ...	0·00	65·60	65·60
12. MooplyValley	0·00	125·05	125·05	30. *Sidapur ...	0·00	74·44	74·44
13. Pachaimalai	0·00	123·94	123·94	31. Pollibetta ...	0·00	85·38	85·38
14. Mudis ...	0·00	202·49	202·49	32. Somwarpett	0·00	85·96	85·96
15. POLLACHIE.	0·00	30·02	30·02	33. Ballupete ...	N.R.	76·01	N.R.
16. Manjeri ...	0·00	125·76	125·76	34. MANGALORE.	0·00	139·39	139·39
17. Nilambur ...	N.R.	101·11	N.R.	35. MADRAS ...	0·00	62·39	62·39
18. Naduvattam	0·00	83·84	83·84				

W = During the week.

P = Previously.

N.R. = No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 7] SAT., FEBRUARY 13, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	97	South Coorg Notes ...	108
Planters' Week, 1926 ...	99	Letters to the Editor—	
Planting Produce in London		Motor Mileage ...	109
Market ...	100	Poetry—	
Xyleborus Fornicatus ...	103	Apologia Pro Suo Stylo ...	110
'Para' Nitrophenol ...	104	Commercial and Meteorolo-	
U. P. A. S. I. Sports Club ...	107	gical ...	111
U. P. A. S. C. Membership List.	108		

EDITORIAL NOTES

Bearing in mind that the Firestone Rubber Company drew a profit of £2,600,000 in 1925, against one of £250,000 in 1921, and that the Goodrich Company made a profit of £1,400,000 in 1925 against a loss of £5,000,000 in 1920; we venture to answer the following question recently propounded by Mr. Punch.

THE QUESTION

When cards were against him John Bull didn't squeal,
So why should friend Jonathan blubber,
If once in a way he's the worst of the deal
And has to pay out on the rubber?

'Punch' of January 2, 1926.

OUR ANSWER

Said the Eagle 'The Profit for two is enough.
(While denouncing the Lion) I'll draw it':
So Jonathan's blubber was just a big bluff
Which didn't come off—for men 'saw' it.

We understand that the preliminary survey of the proposed Quilon-
Ernakulam Railway Line (with Stations at Sasthamkotta, Kayamkulam, Mavelikara, Chenganoor, Thiruvallab, Changanesserry, Pallam, Kottayam, Ettumanoor, Piravom, and Vaikom) will be completed within the next few months. It is estimated that the Line will cost Rs. 2.56 crores to construct. It is proposed to connect Alleppy with Pallam and Mavelikara by respectively a motor boat service and a feeder-line. Another feeder-line will probably connect Ettumanoor with the High Range, touching Mundakayam, Kanjirappally, and Peermade.

Following on the inauguration of a General Provident Fund for Malayan Planters, comes the information that the draft rules for a similar fund in Ceylon will be ready during the course of this month. The Ceylon Estates' Proprietary

Association have, we understand, agreed to make to the Fund contributions proportionate to the amounts subscribed by the Superintendents and Assistant Superintendents themselves.

It would appear the Tamil use of the expression *கொம்பு செவி* (He has an ear like a snake) to indicate that a man has extremely acute hearing is so far at any rate as Cobras are concerned founded on a belief which is not in accordance with fact. Dr. Lucius Nicholls, Director of the Bacteriological and Pasteur Institutes, Colombo, in a recently broad-casted lecture, stated that 'it had been conclusively proved that the cobra is oblivious to all sounds' because its ear is covered with bone and has no tympanic membrane. Its ear, however, he continued, is wonderfully modified to enable it to act as a semismograph and microphone combined, and to receive the most delicate vibrations passing through the ground. When for instance, a snake charmer shakes a box containing a cobra, the cobra 'senses' the resultant vibrations as intensively as we would hear the sound of 100 cannons and is partly infuriated and partly stunned. Dr. Nicholls ridiculed the pretension that cobras can be called forth from their retreats by the monotonous music of a gourd pipe, and maintained that the people who report that they have witnessed such cases have been deceived by clever jugglery with cobras which the 'charmer' concerned had previously tamed.

Mr. G. Nicol Thomson, the well-known Director of Tea and Rubber Companies, in an interview at Colombo early this month stated that the Rubber Growers' Association should now do all in their power to hasten the introduction of their long overdue Central Selling Agency Scheme. Had such an agency existed it would, in his opinion, have fully checkmated the expert manipulation of the rubber market by which American buyers had effected such a striking decline in prices since the commencement of the current year. Considering that stocks at their present low level would only suffice to cover about two months' requirements; it was, he thought, quite obvious that rubber was at present under-priced. He had no doubt that the Dutch would collaborate with the British in forming a Central Marketing Rubber Trust which would be able to maintain prices at a stable level despite the intrusion of speculators and the vagaries of buyers in the U. S. A. An incidental but important result would be that, with the elimination of violent fluctuations in price, the inducement to snatch immediate profits would cease, and consequently the temptation to over-tapping would disappear. Thus, he continued, the bark of the trees would be conserved; and after all rubber estates should be valued not on an acreage or tree basis but on the condition of the bark.

The Ceylon Chamber of Commerce reports that the 1925-26 season for Cardamoms is now well advanced and supplies appear to be plentiful. Throughout 1925 there was a fairly good supply and prices were well maintained. Comparatively small quantities of green cardamoms were offered on the market as compared with 1924, but it is possible that a revival will take place before the close of the present season. A quantity of cardamoms were sent across last year from the MALABAR COAST as well as from Hong-Kong and found buyers in Ceylon. The exports of cardamoms from Ceylon rose from 305,142 lbs. in 1924 to 353,562 lbs. in 1925. The customs returns gives the value of the 9125 exports of cardamoms as Rs. 11,49,192.

PLANTERS' WEEK, 1926

This week we find ourselves between the Gods and the deep blue sea. We are not thinking of the Wharf-fringed ocean in front of this Office, nor yet of the (we believe) exceptionally well appointed Temple somewhere at its back. We allude to a mental dilemma and not to a physical state. Some readers may feel that a technical paper such as this should confine itself to technicalities even in the issue current during 'Planters' Week.' Others would doubtless be glad if the paper eschewed business for the nonce, and concentrated exclusively on the social and sporting side of life. We adopt a middle course; and we hope that even the most ardent business Die-hard (if he exists—which we doubt—outside our imagination) will enjoy the seasonable effort of our tame cartoonist which appears on another page. If he does not, we can fortunately offer a further sop to our hypothetical Cerberus; for some weeks ago we announced that a General Committee Meeting was to deal with quite an imposing array of business on the morning of the 23rd.

Business, however, will not be allowed to interfere with pleasure, and the Sporting and Social side of the comprehensive programme which Mr. Fulcher has provided should amply satisfy the most exacting 'on pleasure-bent' visitor to Ooty; be he or she, man, woman, or child—especially child. For the Kiddies—in addition to such incidental pleasures as escaping lessons, seeing Mummy and Daddy 'performing' at various games of skill, and re-meeting old friends like Charlie Chaplin, Jackie Coogan, and Baby Peggy at the Assembly Rooms—are also to have a Gala Afternoon specially for themselves when the attraction will be nothing less glorious than a Fancy Dress Dance. The Assembly Rooms will be a veritable Wonderland for that function; and we are sure that the youngsters of the Planting Community have sent out invitations to the Ooty children of their acquaintance with a cordiality unsurpassed by that of Alice's friends of the Lobster Quadrille.

Will you, won't you, will you, won't you, won't you join the Dance?

Space precludes even mention of all the adult functions which run into well over 20 different events; so we perforce pass on to the U.P.A.S.C., under whose auspices the Meet, is to take place. The United Planters' Association Sports Club dates its existence from Thursday, the 23rd August, 1923, when the U. P. A. S. I. adopted a resolution proposed by Mr. G. W. Fulcher and seconded by Mr. Stuart Hawkins 'That the present separate accounts for Cricket and Inter-District Sports be discontinued, and that a general fund be formed to be called the 'U. P. A. S. I. Sports Fund' . . . that a Committee be annually appointed . . . and that an All-Inter-District Annual Meeting for the coming year be held at Ootacamund about second half of February.' The first Meet of the Club, as thus constituted, duly materialized under the direction of a Committee consisting of Sir Fairless Barber and Messrs. Fulcher, Robinson and Behr and was held at Ootacamund from Saturday, February 23 to Monday, March 3, 1924. The second Meet was held at the same venue from Saturday, March 21, to Sunday, March 29, 1925.

Mr. G. W. Fulcher was elected to the Honorary Secretaryship which he still so acceptably holds at a meeting of the Sports Club Committee held on Friday, November 28, 1924; so that the forthcoming Meet is not the first which he has successfully organized with an utter disregard for his personal convenience, and an ever-ready response to the continual demands upon his leisure time.

His efforts make it almost superfluous for us in conclusion to wish the U.P.A.S.C. Members and their families, in Annual Meeting foregathered,

A VERY JOLLY PLANTERS' WEEK.

PLANTING PRODUCE IN THE LONDON MARKET

October-December, 1925

Messrs. Leslie and Anderson send us by this Week's Mail the following very interesting review (dated December, 31 1926) of the London Market for Planting Produce during the last quarter of 1925 :—

TEA

The position and prospects for Tea have entirely changed since we reported on September 30. Then it appeared certain that the 1925 production would far exceed the 1924 Crop, but cold weather in Northern India set in earlier than usual. This factor, coupled with the agreement amongst planters to restrict the output for 1926, has put a different aspect on the position. Prices for common and medium qualities, which threatened to be in over supply, have advanced fully 4*d.* per lb. during the past three months, while fine qualities have also shared in the advance. We look for a continuance of present satisfactory prices.

COFFEE

We have had a dull market since the date of our last Report. Prices for spot Coffees have declined, due, to a great extent, to the poor quality of Coffee that has been available, but the tone at recent auctions has been distinctly better, with more business done.

The first arrivals of New Crop of both Kenya and Costa Rica Coffees have been poor, but the quality of later shipments of Kenya Coffee have shown some improvement, and prices have responded. These Coffees while at times unattractive in appearance, retain their quality in the cup and are in demand with the Home Trade Buyers. The crop is likely to be less than last season.

It is expected that the yield of the Costa Rica Crop will be about the same as last year, but so far we have seen no attractive parcels.

We learn, with regret, that the East India Crops are likely to be considerably short of the early estimates. We hope the quality will be attractive, for there is a scarcity of good quality Coffee, for which full prices may be expected.

There has been no enquiry here for crops on C. F. I. terms this autumn, though a few lots of 5 and 10 tons have been sold at full prices for January-March shipment to the Continent.

The season for arrivals of Bukoba (East Africa) Coffee is now over. A fair business has been done, chiefly to Continental Ports during the past season. If consignments were shipped free of blacks, broken and other foreign matter buyers would, we think, purchase this Coffee more freely—on the present basis of 'Plantation f.a.q.' a varying percentage of loss has to be reckoned with.

The present position as regards supplies of Brazils is much the same as a year ago. American buyers continue to adopt a hand to mouth policy, with the result that prices for distant months delivery are likely to appreciate as they come nearer. In the light of the latest reports of Brazilian and other crops we must modify the estimate of the world's production given in

our Report at June 30 at 26 millions of bags—for the 1924/25 Santos and other Brazilian Crops, now being drawn upon, are, we are told, unlikely to exceed 13 millions of bags, so that, exclusive of the visible supply (5,000,000 bags at June 30 last) Brazil Crops, *plus* the Mild Crops, this season, are unlikely to exceed the world's estimated consumption figure for the twelve months to June 30, 1926. The 'Flowering' for the 1935/6 Brazilian Crops, we are informed, has been none too good, so that the really big crop to test the Brazilian's financial ability to hold up supplies is not yet in sight—we see then little prospect of a serious break in Coffee prices yet awhile. It is reported the San Paulo Government have approached American bankers for a fresh valorization loan and have been unsuccessful (the Americans feeling very sore about 'artificial' prices for any products which they cannot themselves control!) We have little doubt that the Brazilians could float the loan on this market, if necessary.

We quote spot prices current in London as follows:—

East India—Good to Fine	...	'A' size—140/- to 155/- per cwt.
do. Medium	...	do. 120/- „ 135/- „
Costa Rica—Good to Fine	...	do. 145/- „ 180/- „
do. Ordinary to Medium	..	do. 115/- „ 135/- „
Kenya—Good to Fine	...	112/- „ 135/- „
do. Medium	...	100/- „ 110/- „
Santos—Superior C. & F.	...	102/- „

Statement of the Imports, Deliveries and Stocks of Coffee at the Port of London for the years 1925, 1924 and 1923.

	Landed.		Home Cons.		Export.		Stock.		
	1925	1924	1925	1924	1925	1924	1925	1924	1923
COFFEE—									
British West									
India ... tons	172	93	116	69	15	32	93	54	64
British East									
India ...	4,475	1,545	1,730	1,431	1,096	481	1,700	58	309
Total British									
Plantation ...	4,647	1,638	1,846	1,500	1,111	513	1,793	112	373
Mocha ...	912	1,219	653	569	321	457	287	341	163
Foreign East									
India ...	1,377	1,098	1,215	968	131	319	567	387	460
Brazil ...	1,289	1,896	793	1,715	303	1,101	935	742	1,694
Colombian ...	2,232	1,584	900	667	1,081	609	777	447	165
Costa Rica ...	9,756	9,882	5,423	5,554	3,773	3,987	1,699	1,164	810
Guatemala, &c. ...	2,195	1,113	624	654	1,118	1,040	728	399	1,259
African ...	8,881	8,815	6,537	6,456	1,117	1,788	2,556	1,122	355
Total Foreign ...	*26,552	25,607	16,145	*16,183	7,844	*9,127	7,549	4,602	4,906
Grand Total ...	31,199	27,245	17,991	18,283	8,955	9,730	9,342	4,714	5,270

[*N. B.—We make these totals 26,642; 16,583; and 9301; but cannot say whether the details or the totals of the Table are incorrect. Similarly, the 4th, 6th and 9th 'Grand Totals' are incorrect. Ed.]

RUBBER

Early in December the highest price of the year was touched, viz., 4/8½d. per lb. for R. S. Sheets, while the average price for the past quarter has also been the best of the year.

Supplies now appear to be about equal to the demand—Americans, through their spokesman Mr. Hoover (a prospective candidate for the Presidency be it noted) are inveighing against the wickedness of the control of rubber—nothing being bad enough for British Planters backed by the Colonial Office, but they should be the last community to 'call the kettle black,' for they are notorious for rigging markets to artificial prices, if the opportunity occurs. Meantime, they feel grieved at having to pay high prices for Coffee and Rubber.

It will be natural, we think, to look for a gradual decline in price during the coming year as production increases, but with the continuously increasing demand for Rubber we do not expect to see any serious fall in values, at any rate, during the first half of 1926.

We quote to-day's prices :—

PLANTATION SMOKED SHEETS, Spot	...	3/10½ per lb.
do. Equal Monthly Quantities, January/March	...	3/9 "
do. do. April/June	...	3/5 "
do. do. July/December	...	3/2 "
London Stock 5,544 tons. Same date last year 29,481 tons.		

CARDAMOMS

In the absence of first-hand supplies of 'bleached' it is difficult to give a close quotation, but we understand they are enquired for, and we hope to obtain full prices for the early shipments. 'Greens' have declined in value.

We quote :—

MYSORE PLANTATION (Cured) Fine Bold	...	7/6 at 8/- per lb.
do. " Reds and Splits	...	5/6 " 6/- "
do. " Smalls	...	5/- " 5/6 "
MALABAR, " Bold	...	5/6 " 6/6 "
ALLEPPY GREENS (C. I. T. Terms)	...	4/- "

PEPPER

We have had a continued advance in prices since we last reported—the shortage of crops in the Far East is confirmed, with the result that values have steadily advanced. Outside speculation has no doubt assisted in raising prices, but a set-back of 35s. per cwt., in a few days has been recovered, and the market, though quiet, is steady. We look for prices to be maintained for some time.

We quote :—

TELLICHERRY BLACK, Spot	...	1/6 per lb.
do. January/March Shipment	...	157/6 per cwt.
ALLEPPY, January/March Shipment	...	152/6 "

OILSEEDS

Values have declined, due to a great extent to liberal offers of Coromandel Groundnuts during the past six weeks. Prices still favour buyers.

We quote :—

East Africa Gingelly Seed, January/March	...	£23 10 0 per ton C.F.I.
do. Groundnuts	do.	£20 15 0 " "
Coromandel do.	do.	£21 0 0 " "

XYLEBORUS FORNICATUS IN INDIA

BY

DR. C. F. C. BEESON, I.F.S., F.E.S.,

Forest Entomologist, Forest Research Institute, Dehra Dun, India.

In his account of the distribution of *Xyleborus fornicatus* Eichh,—the shot-hole borer of tea—Speyer reviews the previous records of the occurrence of this species in India and concludes that 'authorities in India have recorded this insect in that country on the slenderest ground' (Dept. Agri., Ceylon, Bull, 39 (1918) p. 7). He admits only one record as authentic, i. e., Bangalore, in castor oil tree, *Ricinus communis*. Incidentally Speyer (l.c. p. 7) incorrectly ascribes to the present writer the statement that *Xyleborus fornicatus* attacks *Shorea robusta* in India, an error which occurs in the abstract of the paper given in the Review of Applied Entomology, IV., p. 316, but not in the original article (Indian Forester, XLII., (1916) pp. 216-223). *Xyleborus fornicatus* is not known to breed in *Shorea robusta*.

In the 59th Annual Report of the Government Cinchona Plantations and Factory in Bengal for 1920-21, p. 2, *Xyleborus fornicatus* is recorded from Mungpoo, Bengal, in Cinchona bushes.

In the Zoologische Mededeelingen' Rijks Museum, Leiden, Deel VII, p. 184 (published April 1923) Eggers refers to specimens from the Nilgiri Hills in the Hagedorn collection.

To these I am able to add the following records made personally in 1924 and 1925, which may be taken as proof that the species is indigenous in India.

- MADRAS : 1. Nilambur Forest Division, 300 feet, in an unidentified timber.
2. Nadghani Ghat Road, 1,500 feet, Nilambur District, in logs of *Ixora parviflora*.
3. Hillgrove, 4,000 feet, Nilgiris, in logs of *Odina wodier* and *Erythrina indica*.
4. Coonoor River, 2,500 feet, Nilgiris, in cut branchlets of *Albizia odoratissima*.

- MYSORE : 5. Bangalore, 3,000 feet, in living *Ricinus communis* trees.

- BENGAL : 6. Chittagong Hill Tracts, 500 feet, in suppressed *Gmelina arborea* saplings.

In addition, the Forest Research Institute collection has one specimen in poor condition collected in 1912 in Katha Division, Burma ex *Tectona grandis* saplings.

All the Indian specimens are slightly more robust and less convex in the basal third of the elytra than the specimens of shot-hole borer occurring in tea in Ceylon. The males, of which several were obtained in each locality in Madras and Mysore, are also generally broader and larger than males from Ceylon tea plants, but the other characters cited by Eggers do not hold good.

The Indian form of *fornicatus* apparently corresponds to the large Ceylon race referred to by Speyer in Bull. Ent. Res. XIV (1923), p. 15, and also agrees with the form found in forest regions in Java. The slightly

smaller form with a more convex elytral curve and a more parallel-sided prothorax, which occurs in tea in Ceylon, was described by Eggers (l.c.p. 184) as a new species, *fornicator*; but in a polyphagous species of wide distribution such slight morphological differences scarcely justify a higher rank than that of biological race. I agree with Winn-Sampson (Ann. Mag. Nat. Hist. (9) XI (1923), 270) that *Xyleborus fornicator* Eggers should not be accepted as a good morphological species; on biological evidence, however, the retention of the name in sub-specific rank is desirable.

No predators or parasites were reared with South Indian *fornicator* in the Insectary at Dehra Dun. As with most species of the genus *Xyleborus* parasitism of the broods is under normal conditions a negligible factor. Hundreds of broods of different species of *Xyleborus* from all parts of India have been reared at Dehra Dun during the last ten years without the discovery of economically important natural checks. It is therefore improbable that a search in India for an effective parasite of the shot-hole borer of tea will yield more satisfactory results than those obtained so far in Java.

‘ *The Tropical Agriculturist.* ’

‘ PARA ’ NITROPHENOL AS A PREVENTIVE OF MOULD ON SHEET RUBBER

BY

T. E. H. O'BRIEN,

Chemist, Rubber Research Scheme, Ceylon

One of the most common troubles, which occur in connection with smoked sheet manufacture is that, under adverse conditions, the sheets are liable to become mouldy while in transit from producer to consumer. While it has many times been shown that a light growth of mould has no harmful effect on the rubber, this defect is frequently made an excuse by the broker for claiming a reduction in price.

During the past two years experiments have been in progress at the Research Scheme Laboratories to determine whether conditions of smoking can be so arranged that mould is entirely prevented. It has been shown that liability to mould can be minimized by attention to certain points in manufacture (see Chemist's Report for 1924), and that in cases where an estate has abnormal trouble with mould it can usually be traced to incorrect methods of manufacture. It is equally clear however that sheet rubber cannot be made entirely immune to mould by smoking. The conclusion is therefore reached that if it is desired to make smoked sheet quite free from liability to mould, the question of adding some disinfectant to the rubber must be considered.

Rubber scientists have for a long time been looking for some suitable chemical for this purpose. Many substances have been tried, but until recently none had been tested which was altogether satisfactory. The Scientific Officers of the Rubber Growers' Association have recently experimented with a substance called *para* nitrophenol, and results of tests indicate that this chemical is likely to be of great value as a preventive of the chief defect of smoked sheet.

The essential qualities of a substance for this purpose are as follows:—

1. It must be cheap Commercial *para* nitrophenol should not exceed Rs. 1-50 per pound in Colombo.
2. It must be effective in small quantities. 0.1 % (calculated on weight of rubber) appears to be sufficient to prevent mould.
3. It must be easy to handle and should preferably be soluble in water. *Para* nitrophenol is a stable solid and is sufficiently soluble in water for the purpose.
4. It must have no harmful effect on the rubber. Vulcanization tests carried out by the Rubber Growers' Association show that it has no appreciable effect on the rubber. Dr. H. P. Stevens concludes a recent report as follows: 'Once more the conclusion is reached that *para* nitrophenol can be safely used as a fungicide without any deteriorating effect on the rubber.' (R.G.A. Bulletin, Vol. VII, p. 498.)
5. It should not affect the appearance of the rubber. *Para* nitrophenol has no effect on the appearance of smoked sheet.

According to reports from Malaya the substance can be used in two ways:—

1. An appropriate quantity can be dissolved in the acid used for coagulation and thus introduced into the latex.
2. The sheets after rolling and washing can be soaked in a dilute solution of the disinfectant.

Tests carried out in these laboratories show that the first method would probably not prove altogether satisfactory under Ceylon conditions. One of the disadvantages of *para* nitrophenol is that it has a slight clotting effect on latex. This is not of importance under Malayan conditions where coagulation is carried out in tanks and after addition of acid it remains only to place partitions in position. In Ceylon, however, after addition of acid, the latex has to be transferred to pans or troughs, and there is a danger that clotting might set in before this is complete, thereby spoiling the appearance of some of the sheets. In a test in which *para* nitrophenol was used in the proportion of 0.1—it was found that clotting started about 10 minutes after addition of the acid.

The second method therefore appears to be most suitable for adoption in Ceylon. The sheets, after rolling and washing in the usual way, are soaked in a weak solution of the disinfectant for $\frac{1}{2}$ —1 hour and then hung to drain and removed to the smoke-house. It is important that while the sheets are being soaked they should be turned over at intervals; otherwise parts of the sheet might not come in contact with the disinfectant and would naturally not be protected against mould.

Tests have been carried out in these laboratories which fully confirm the results reported by the R. G. A. Officers in Malaya. Results of one series of experiments are given below. Samples of sheet were prepared in which different amounts of *para* nitrophenol were added to the latex with the coagulating acid. Other sheets were washed after rolling, in solutions of *para* nitrophenol of various concentrations. The sheets were then smoked and tested for liability to mould by the standard test devised by Dr. De Vries; i.e., pieces of sheets are inoculated with mould and placed

in a vessel over a 7 % solution of common salt which provides a very moist atmosphere. A comparison is made of the amount of mould on different samples after a certain length of time. These tests were repeated on samples which had been hung to air dry for 8 days after smoking.

1. 'Para' Nitrophenol added to The Latex

APPEARANCE OF SHEET AFTER 21 DAYS IN MOULD TESTING CHAMBER

Amount Added.	1st Test.		2nd Test.	
	(after smoking.)		(8 days after smoking.)	
Nil	...	Sheet covered with mould	...	Sheet covered with mould
0.05%	...	Patches of mould	...	Patches of mould
0.1 %	...	No mould	...	No mould
0.15%	...	do	...	do
0.2 %	...	do	...	do

2. Sheets soaked in 'Para' Nitrophenol

Strength of Solution.	1st Test.		2nd Test.	
	(after smoking.)		(8 days after smoking.)	
Nil	...	Sheets covered with mould	...	Sheets covered with mould
0.05%	...	No mould	...	No mould
0.1 %	...	do	...	do
0.15%	...	do	...	do
0.2 %	...	do	...	do

It is also reported by the R. G. A. Officers that *para* nitrophenol is of value in crepe manufacture as a preventive of spots. It is recommended by them that the thin crepe after rolling should be soaked in a dilute solution of the chemical. This method appears to have the distinct disadvantage that a considerable amount of liquid would be held by the crepe and would be transferred to the drying sheds. Tests were made here to determine whether the chemical could be incorporated in the latex in the manner suggested for sheet manufacture, but in each case the colour of the finished blanket crepe was poor. The former method would doubtless merit consideration by any estate which had serious trouble with spotted crepe.

Use of 'Para' Nitrophenol

It is considered by the Research Scheme that *para* nitrophenol is likely to be of considerable value as a disinfectant in rubber manufacture.

For mould prevention *para* nitrophenol should be dissolved in water in the proportion of 1 lb. to 100 gallons water. The freshly rolled sheets after washing should be soaked in the solution for $\frac{1}{2}$ –1 hour, taking care that the sheets are turned over at intervals. They should then be hung to drip and transferred to the smoke-house. It is stated by the R. G. A. Officers that the solution can be used for 2 days in succession and should then be thrown away.

Arrangements are being made for a Colombo firm to obtain stocks of *para* nitrophenol. In the meantime a few $\frac{1}{4}$ lb. samples are available on application to the laboratories. If any estate contemplates ordering the chemical direct from England, it would be advisable to communicate with the writer, in order to obtain a specification of a grade suitable for the purpose.

For full details of tests carried out by the Officers of the Rubber Growers' Association the reader is referred to R. G. A. Bulletins, February, 1924 to August, 1925—*The Quarterly Circular of the Rubber Research Scheme, Ceylon*.

U. P. A. S. I. SPORTS CLUB

Planters' Week, 1926

'PINCHES' GOLF CUP.—Men's singles open.

Conditions—Open to members of the Sports Club.

1st. round—18 holes—qualifying, medal play.
pairs to be drawn for.

4 best scores to qualify, if entries are 8 or over.

2 " " " " " " " " under 8.

Semi-final and final—match play—18 holes.

The competition to be played under O. G. C. local rules.

ENTRIES for the various competitions received up to February 2 are as given below:—

TENNIS—Inter district	9 districts.
Harper Cup (Men's)	16
Ladies' Cup (Murphy's)	11
Veteran's Cup ...	2

GOLF—Inter district ...	6 districts.
Pinches' Cup (Men's)	12
Windle's Cup (Ladies')	4

CRICKET—Players ...	22
---------------------	----

CHILDREN FOR FANCY DRESS TEA—

Planters' children ...	17
------------------------	----

Estimated number Ooty guests ...	20
----------------------------------	----

Several districts have not yet sent in their entries.

ADMISSION TICKETS.—Members are reminded that should they not obtain these before leaving their districts from their own Club Representative, they can procure same from the Honorary Secretary on arrival in Ootacamund.

SIGNING OF CHITS AT OOTY CLUBS.—Honorary members for the 'Week' are urgently requested to give the district from which they come when signing chits. Last year some of the signatures were quite unreadable, and it will be decided at the next Committee Meeting whether or not districts should be asked to be made responsible for all undecipherable chits. We can hardly expect the Clubs in Ooty. to bear the loss, and the Sports Club is less able to do so.

ALTERATION OF PROGRAMME.—On Tuesday, February 23, dancing before dinner at Woodside has been altered to 'Cinderella' Dance 9.30 p.m. There will be no dancing before dinner that evening.

'VETERANS' CHALLENGE TENNIS CUP.—(Presented by J. A. Richardson, Esq.) This has arrived and is a very beautiful Cup. Entries to-date are small for this event, but there are others to come in, and there are quite a number of members coming to the 'Meet' who will never see fifty again. When they see the Cup, I am quite sure that they will enter, and I would remind all that this Competition is a handicap one.

WOODBRIAR ESTATE,
DEVARASHOLA,
February 5, 1926.

G. W. FULCHER,
Honorary Secretary.

U.P.A.S.I. SPORTS CLUB

Supplementary list of Members whose 1925-26 Subscriptions
were received at the Upasi Office between Monday,
January 18, and Wednesday, February 10, both
dates inclusive

Anamalais—

Darkin, B. D.
Dennys, C. E.
Hope, R. V.
Horrocks, Dr. O.
Macrae, H. R.
Oakes, G. M.
Rogers, G.
Simpson, G. R.

Central Travancore—

Farley, G. P.
Ford, G. S. N.
Fraser, J. F.
Glenie, W. B.
Inman, W. F.
Lewis, T. M.
McMullin, R.

Coorg—

Gray, E. M.

Kanan Devans—

Armstrong, R. D.
Craske, J. C. B.
Davies, N. J.

Dixon, A. H.

Francis, E. H.

Fryer, A.

Grandage, F. G.

Keir, R. S.

Marr, G. D.

Martin, A. Ff.

McHardy, D. C.

Newman, H.

Olney, W. K.

Ranicar, E. E.

Shields, R. St. C.

Stanton, W. M.

Stott, R.

Tolson, J. W.

Tweedie, D.

Yates, A.

Mundakayam—

Jackson, E. A.

Mysore—

Courpalay, C. R. H.

Nilgiris—

Blackhouse, J.

Grove, R. N. C.

Porter, L. L. (L.M.)

Nilgiri-Wynaad—

Hart, A. N. Scott.

Smail, J. F.

Will, J. H.

Shevaroy—

The Association.

South Travancore—

Mackie, J. (L.M.)

West Coast—

The Association.

Knight, A. W.

Lockie, H. R. (L. M.)

Wynaad—

Craig, W. A.

Pitcairn, Capt. D. N.

U.P.A.S.I.—

Munro, D. G.

Winterbotham, F. W.

Donation—

Vincent, E.

DISTRICT NOTES

A. South Coorg

CRICKET

There was a half-day cricket match last Sunday, January 31, between the South Coorg Gymkhana Club and the Victoria Cricket Club, V'Rajpet, played on the South Coorg Ground.

Victoria Club won the toss and went in to bat, and ran up a total of 122 all out. Tea was then served, and afterwards the South Coorg team went in, but fared disastrously against the bowling of Mr. Thimmia, of V'Rajpet, and were all out for 79, leaving the V'Rajpet team victorious by 43 runs.

The weather kept fine, and there was quite a large number of spectators.

TENNIS TOURNAMENT

Entries for the forthcoming Tennis Tournament are coming in well. The draws, and handicaps will be out on the 8th instant. The first matches will start on the 9th afternoon. The Courts are in excellent condition.

• WEATHER

A February, as free from rain as January has been, will suit both pleasure and work; and it is therefore satisfactory to be able to report that there are so far no signs of impending rain. Our Coffee does not require moisture yet a while, and a dry spell would also result in the present excellent condition of the Tennis Courts being maintained until the forthcoming Tournament has been played off.

YOUR SOUTH COORG CORRESPONDENT.

[Shortly after the above was written, .28 inches of rain fell! *Ed.*]

LETTERS TO THE EDITOR

Motor Mileage

THE MANAGING EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

In reply to 'A.C's' letter, *re* the above. He mentions the point that no tolls have been taken into account, in the reckoning of the six annas a mile rate, made out by Mr. Newcome.

Tolls are paid separately, and therefore cannot be included in mileage.

Yours, etc.,
'TOLLS'.

February 3, 1926.

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

Some of your correspondents do not seem to realize the amount of wear and tear that takes place with a Ford Car in heavy touring in recruiting districts.

The following is the actual amount that I have had to spend in hard cash for repairs and renewals during the past 33 months. The figures include repairs and renewals only, and do not include any new additional 'gadgets', nor any of the expenditure in replacing tyres or repairing them, and only cover purely mechanical and constructional parts of the Bus. Further, it *excludes* the repairs of one accident which were covered by Insurance. Re-painting once is included :—

First	12 months	...	Rs.	554	5	0	or	Rs.	46	per mensem
Second	12	„	„	955	3	0	or	„	80	„ „
Last	9	„	„	871	8	0	or	„	96	„ „
<hr/>										
TOTAL	33 months	...	Rs.	2,381	0	0				

I have driven the car myself the whole time, but apart from road repairs, I have no time to carry out other repairs myself, and so they all had to be done in the local shops. It works out close on Rs. 75 per mensem, for an average of a little over 1,000 miles a month.

This alone increases the figures given by Mr. Newcome to the extent of nearly one anna per mile ! And the older the car gets, the more the cost of repairs and renewals increase !

Yours, etc.,
C. H. BROCK,
Director.

OFFICE OF THE DIRECTOR,

LABOUR DEPARTMENT, U.P. A. S. I.

COIMBATORE.

February 5, 1926.

Motor Mileage

THE EDITOR,

'PLANTERS' CHRONICLE',

MADRAS.

SIR,

In reply to A. C. in the Chronicle of January 30, the average Planter in this part of the world usually employs only a 'greaser,' chokra, or even dog-boy trained up for the work, and the average pay is probably well below Rs. 30 a month. People who required liveried chauffeurs, with crest complete, should pay for this luxury themselves, and not expect to draw it out of mileage.

As regards toll, I understand that employees of the Labour Department are allowed these as an extra, as well as batta for servants when in camp.

My Ford speedometer has petered out after recording over 4,000 miles so I regret I can give no more figures. It is easy to pull other people's figures to pieces. But will A. C., or those who think with him, now let us have figures, showing that a fair mileage rate is eight annas, ten annas, or even one rupee? The six anna wallahs have proved *their* case.

SOMWARPET,

N. COORG,

February 8, 1926.

Yours, etc.,
L. NEWCOME.

APOLOGIA PRO SUO STYLO

One of the Great Unpaid Speaks

I know I'm a hopeless misnomer,
I know I'm no good at the job,
I'd sooner sit quiet reading Homer,
Than play at this Bobbity Bob.
They talk of Geneva and Labour,
They talk till they're blue in the face,

I just go to sleep : my behaviour
I'm sure is a blessed disgrace.

But

Blame the Government
(Curse the misgovernment)
But for Heaven's sake don't blame me.

I've written manurila nonsense,
I've tried to make dry bones live,
I've written against my conscience,
Things that people will never forgive.
I've gassed about motors and mileage,
To rob e'en the poorest I've tried :
Had only I talked about silage
Men would have laughed till they cried.

But

Blame 'Waddy', blame Brock
Talk all round the clock
But for Gawd's sake don't blame me.

'L. N.'

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending February 6th, 1926

Bank Selling Demand Draft on London

1st	2nd	3rd	4th	5th	6th
18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending January 16, 1926	January 1 to January 16, 1926	January 1 to January 16, 1925
TEA (WEEK ENDING JANUARY 16, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 8.55	1 8.42	††1 9.25
Thayamudi ...	226	1 10½	S. India	**1 10.31	††1 9.20	1 8.85
Periakaramallai ...	211	1 9½	Ceylon...	1 10.19	1 10.17	1 10.21
Mukkottumudi ...	215	1 9¼	Java ...	1 5.60	1 5.03	1 4.90
			Sumatra.	Nil	1 6.73	1 7.72
			Nyassa-land.	Nil	Nil	Nil
(b) Central Travancore			Total ...	*1 9.04	†1 8.87	†1 9.14
Thengakal ...	69	1 9¾				
Thungamallai ...	102	1 9				
(c) Kanen Devans—						
Letchmi ...	163	2 1¾				
Guderal ...	153	2 1¼				
Chockanad ...	214	2 0¼				
(d) Nilgiris—						
Prospect ...	223	1 11¼				
Glendale ...	100	1 9¾				
(e) Wynaad—						
Erramaculla ...	60	1 7¼				
Elstone ...	38	1 7				

(b) SPECIAL COFFEE CABLE

LONDON, FEBRUARY 10, 1926

'A' COFFEE

148s. PER CWT.

MARKET QUIET

** Based on 2,773 packages.

†† " " 9,953 "

†† " " 11,835 "

* Based on 76,977 packages.

† " " 87,538 "

† " " 165,790 "

(c) *Precis of Reports on London Markets received on February 8, and covering the week ending January 16:—*

(1) *Tea.*—On Monday January 11, the market showed an all round improvement which amounted to from 1*d.* per pound for Mediums to $\frac{1}{4}$ *d.* per pound for Common Sorts. On Wednesday, January the 13th, a further increase was registered on the Monday's prices of from $\frac{1}{2}$ *d.* per pound for Mediums to $\frac{1}{4}$ *d.* per pound for Common Sorts, which were unobtainable at less than 1*s.*/6*d.* per pound. It is especially satisfactory to see South Indians occupying the place of honour in the Week's averages on the previous page, though ofcourse it must be remembered that the quantity offered was extremely small.

(2) *Rubber.*—During the Week under review the stocks increased by 1,531 tons from 7,320 tons to 8,851 tons ; and prices for both Spot and Forward positions showed a sympathetic decrease of from 3*d.* to 3 $\frac{1}{2}$ *d.*, on the prices shown on this page last Week. On Saturday, January 16, the spot quotation for Plantation first latex crepe was 3*s.*4*d.*

(3) *Coffee.*—The Coffee offered at the auctions was exclusively Kenyan Ugandan, and Tanganykan (with the first mentioned in great predominance), all of which were in great demand and registered an advance of from 2*s.* to 5*s.* per cwt., on the prices obtainable during the previous Week ending January 9. The Home trade buyers were especially active, and they appear to have postponed purchasing necessary supplies until the last moment in the hope of a break in the ruling prices which they considered unduly high in view of the large supplies being received.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, February 6, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	N.R.	13.97	N.R.	19. Coonoor ...	...	92.31	92.31
2. *Tenmalai.	0.36	102.89	103.25	20. Kotagiri ...	...	71.55	71.55
3. Mundakayam.	0.50	156.34	156.84	21. Ootacamund	...	53.19	53.19
4. *Peermade.	...	173.67	173.67	22. Yercaud ...	...	55.55	55.55
5. Twyford ...	...	202.44	202.44	23. Devala ...	0.18	132.06	132.24
6. V'periyar ...	...	81.67	81.67	24. Gudalur ...	...	74.65	74.65
7. Kalaar ...	...	212.34	212.34	25. CALICUT ...	N.R.	134.54	N.R.
8. Chittuvurrai	...	64.05	64.05	26. Kuttiyadi ...	...	179.44	179.44
9. BODI'KANUR	...	28.27	28.27	27. Vayittiri ...	...	160.31	160.31
10. COCHIN ...	0.40	110.45	110.85	28. Manantoddi.	...	110.87	110.87
11. *Mooply ...	N.R.	116.21	N.R.	29. Billigiris ...	...	69.19	69.19
12. MooplyValley	...	125.89	125.89	30. *Sidapur ...	N.R.	74.44	N.R.
13. Pachaimalai	...	124.05	124.05	31. Pollibetta ...	0.28	85.38	85.66
14. Mudis ...	...	202.53	202.53	32. Somwarpett	...	86.14	86.14
15. POLLACHIE.	...	30.18	30.18	33. Ballupete ...	0.08	76.16	76.24
16. Manjeri ...	0.82	125.76	126.58	34. MANGALORE.	...	139.40	139.40
17. Nilambur ...	...	101.26	101.26	35. MADRAS ...	...	63.35	63.35
18. Naduvattam	N.R.	84.32	N.R.				

W = During the week. P = Previously. N.R. = No Return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : **UPASI**, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 9] SAT., FEBRUARY 27, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	137	Letters to the Editor—	
Malaria ...	139	Motor Mileage ...	148
The Export of Fertilizers ...	141	Exports of Coffee, Rubber and	
District Association Meetings—		Tea ...	150
Anamalais ...	143	Commercial and Meteorolo-	
District Notes—		gical ...	151
A. North Coorg ...	146		
B. South Coorg...	148		

EDITORIAL NOTES

Arms and the Man. The Madras Government by a communique dated 28th January, 1926, notifies that possessors of fire-arms when about to proceed on furlough should deposit their weapons either with the Police, a licensed dealer or a private individual ; and that dealers and individuals with whom arms are thus deposited should apply for free licences in respectively Forms XIII and XIV ; subject to the proviso that private individuals taking over pistols and revolvers must pay the prescribed fee for a new licence which can be applied for on Form XVI. The Government states that it views with concern the increasing disregard of these regulations and therefore takes the opportunity of warning those who ignore them that they are rendering themselves liable to punishment under the Indian Arms Act.

Rubber In Posse. We have received from the European Manager of *The Christian Science Monitor* a copy of his Paper of the 11th ulto. which contains an article of over a column on the possibilities of the Philippines from the Rubber Grower's point of view. Messrs. J. W. Harriman, President of the Harriman National Bank of New York and John W. Haussermann, Vice-President of the American Chamber of Commerce, are, it states, urging the Administration at Washington with all the influence at their command to make a two-fold modification of the existing law : the first being designed to put the Philippines on an equal footing as regards territorial status with Hawaii, Porto Rico, Panama and Alaska, and thus guarantee stability of government ; and the second to annul the present Philippine land law which prevents any one interest from

purchasing more than 2,530 acres of land. The above mentioned gentlemen and their influential following of prominent New York Bankers and Businessmen assert that it is only the Government dilatoriness in introducing the necessary legislation that is preventing capitalists from exploiting the stupendous possibilities which are clearly indicated in the exhaustive report on the Philippines as a source of rubber which was presented to the Department of Commerce over six months ago. That report contended that the Philippines, properly worked, would prove superior to the best producing regions in the British and Dutch East Indies at the present time ; and stated that the indigenous labour available locally would suffice for an outturn of up to 70,000 tons a year. It is understood that the Philippine legislature would be quite willing to consider favourably any proposals put forward by the U. S. A. Congress on behalf of prospective American Capitalists provided they did not conflict with the interests of the Filipinos themselves.

The Travancore Government Gazette of the 16th February, 1926, contains a notification by the Forest Department inviting
And tenders for tapping rights on $42\frac{3}{4}$ acres containing over
In Esse. 3,000 tappable rubber trees in Kondodi, Uliyanadu, Parayanthode, and Karippanthode. Tenders will be received by the Forest Officer, Koni Division, up to 3 p.m., on the 2nd of March, 1926. The lease will be for five years and the lessee is to tap from March to December inclusive and rest the trees for the remaining two months of each year. Detailed regulations as regards mode of tapping, weeding, and general maintenance of the plantations are also set forth.

We notice that at the Twenty-Second Session of the Sri Mulam Popular Assembly, which commenced its sitting this week, Mr.
Travancore F. Hawkins of Cheruvalley is to propose that offences
Regulation under Sections 3 and 8 of the Travancore Rubber Stealing
IX of 1087 Prevention Regulation IX of 1087 should be made cognizable, or in the alternative that a Justice of the Peace should be appointed for the Mundakayam District with power to issue warrants of arrest. At present the Regulation can be violated with a considerable chance of impunity ; and the suggested amendments are designed to help the Police to bring offenders to book.

Coffee :—

Judging by the state of affairs obtaining in Mangalore at the end of last week, the Coffee Market is only just about holding its
The Local own at from Rs. 85 to Rs. 90 per cwt. which works out at
Markets. about 10s. per cwt. more than the present London price. No less than 150 tons of Plantation Coffee was put up for sale on Saturday, February 20th ; but most of it was withdrawn, as in view of the heavy offerings and of the uncertainty regarding the future buyers were naturally not inclined to meet the views of sellers who, in certain cases, rejected offers of as much as Rs. 90-8.

Pepper :—

At the beginning of this week the Mangalore quotation was Rs. 16-12 per maund of $28\frac{1}{2}$ lbs. and the Mysore quotation was Rs. 19 to Rs. 20 per 25 lbs.

Cardamoms :—

On the 20th instant the Mangalore quotation was Rs. 48-8 per maund and the Mysore figure was Rs. 50 per 25 lbs.

MALARIA

BY

SIR RONALD ROSS

*(Being the substance of an Address to the Sabaragamuwa (Ceylon)
Planters' Association on January 30, 1926.)*

I am greatly honoured by the invitation from your Chairman to come and speak to you, more than to lecture. I have already given three lectures in Ceylon and I propose now to adopt the same procedure which I find is best from experience. I don't propose to talk to you much upon malaria. We will go along and after that I think the best way is to ask and enquire of me as to details and difficulties. That is the best way to get forrader. If any of you have got any difficulties on the general subject of malaria and mosquitoes I shall do my best to reply. I only hope you won't throw things at me if I reply somewhat too vigorously to the questions. (Laughter.)

HISTORY OF MALARIA

Dwelling on the importance of the question of malaria for all tropical countries, Sir Ronald put one or two points about the history of knowledge of this subject before the audience. He traced the history of malaria from the ancient Greeks and Romans who named it marsh fever, and were aware of the causation of the fever and of two or three distinct types of it. It was in 1620 that a most invaluable discovery was made by the indigenous people of a particular part of South America. They discovered cinchona bark from which quinine is manufactured. It was discovered that this bark had a curative action on this particular kind of fever. The bark was introduced to Europe by the Jesuits and was then called Jesuits bark. The next step in knowledge was taken in modern times when in 1880 the parasite of malaria was discovered by a French Army Surgeon, Dr. Laverol, subsequently of the Pasteur Institute. He found the parasite in the blood of a patient.

THE MALARIA PARASITE

It was a very minute creature which lives inside the red blood corpuscles. It was generally assumed that a hundred million of these minute masses of jelly are required to produce an attack of malaria fever. It must be understood that many people may have these little parasites in their blood without having attacks of fever. They don't begin with fever, it is only subsequently that the fever comes when the parasites remain sustained in the patient's blood. These parasites are little animals, not bacteria, such as is the case in tuberculosis or cholera. The information how these got into the blood was obtained by Sir Patrick Manson, who paid a visit to Ceylon. He was the man who first suggested the possibility that these parasites were introduced into the blood by the agency of mosquitoes. The science of parasitology, which is not known sufficiently to lay people, showed that parasites were apt to be carried from host to host, by the agency of intermediary animals, such as flies, bugs, lice, etc.

THE ANOPHELES

In 1895 Sir Patrick Manson persuaded him (Sir Ronald Ross) to undertake the investigation of the suggestion that mosquitoes carried malaria. He worked in India for two or three years and after several failures succeeded in finding a body like the malaria parasite in certain species of mosquitoes which was now recognized as the anopheles. The first indication of that was obtained on August 20, 1897. Subsequently the whole development of the malaria parasite in mosquitoes was made known. Through the microscope it was found how the little parasite grew attached to the stomach wall of the mosquito and how the parasite was conveyed to man through the spores of the mosquito. It was quite an unexpected discovery in 1898. It was a miracle ; he could hardly believe it at the time when he saw the germ in the salivary gland of the mosquito. That discovery disclosed the whole story of malaria. Every step has now been worked out for nearly quarter of a century, and nobody thinks of contradicting or questioning the matter at all. As a matter of fact parasites need two hosts, one the victim of the other. It was the most economical method of life for the parasite. It must be remembered that Nature has behind all this a meaning which was beyond human thought, or even imagination.

CURE OF THE DISEASE

The next thing, said Sir Ronald, was to find out how they were going to cure this disease. They have all heard of quinine. It was a medical matter. There were several other methods of curing and treating malaria. There were great remedies such as arsenic benzal, but quinine was universally used. During the war he was Malaria Consultant at the War Office and was conversant with the Salonica outbreak. There were a number of expert medical officers, who tried different forms of treatment for malarial fever, nearly every one of which failed, except quinine. He advised quinine to be taken daily for at least three months, ten grains daily.

QUESTION OF PREVENTION

The question of prevention was of the greatest importance for all Ceylon. He had been round a lot of plantations on the southern side of the mountains and was extremely disappointed, he was sorry to have to say at the absence of malaria. (Laughter.) He thought they were going to have hundreds of cases all around but in those parts that he had been, there was hardly any. On Monday he was going to a district which, he was assured, contained a great deal of malaria. He would not name the district, but was going to have a look. There is an easy method of estimating the amount of malaria in any locality. It was tried first in India, the examination of native children for enlargement of the spleen and also of adults. He found on examination in certain villages as much as 100 per cent. They were very bad places. Sometimes it was 40 per cent or 50 per cent, but generally it was 33½ per cent among native children. Mr. Carter, the Malariologist, has prepared a map, which is admirable, and he has prepared an excellent chart. Ceylon was really lucky in having a man like Mr. Carter and he hoped that his services would be continued as long as possible.

To be concluded next week).

EXPORT OF FERTILISERS FROM THE MADRAS PRESIDENCY DURING 1925

BY

**RUDOLPH D. ANSTEAD, M.A., DIRECTOR OF
AGRICULTURE, MADRAS**

In view of the resolution passed at the last Annual Meeting of the U.P.A.S.I., instructing the Secretary to obtain figures showing the amounts of manure exported from India annually; the appended figures, which show the export by sea of bones, oil-cakes, horns and oil-seeds from this Presidency during the year 1925, may be of interest. It is not possible to obtain figures of the rail-borne export, but these figures will serve to indicate the annual drain on the Presidency.

While the export of bones has decreased by 28 per cent during the year, the export of oil-cakes increased by 31 per cent. Ceylon still takes the majority of our fertiliser materials; while the Straits Settlements, Federated Malay States, and Germany take a large quantity of oil-cake; and France, Belgium, and the United Kingdom are our main customers for horns. One notable feature this year is that Java appears to have discovered our oil-cakes, and it will be of interest to note whether they follow up this discovery in 1926.

It has been stated by the opponents of the restriction of export that were the export of bones prohibited, their value would fall so low that it would not pay to collect them. It may be replied that it will always pay the cultivator to collect them. If what is meant is that it will not pay to crush them, we again reply that it will pay the cultivator to collect and crush bones co-operatively, and if they have no export value the cost of producing bone meal for fertilizer will merely be the cost of collection and crushing, plus interest on the capital sunk in disintegrators and depreciation on machinery. This will bring the price of production low enough to make it a paying fertiliser to use, and our object will have been gained.

It is not without interest to follow the export and import of Rice, the Staple food of the Presidency, which also has a bearing on the general question.

During the year 1925, the Madras Presidency imported 84,796 tons of rice and paddy, and exported 56,536 tons, and the following table shows the direction in which these imports and exports moved. Ceylon is the chief market for our exported rice and Burma our main supply of imported paddy :—

IMPORTS			EXPORTS		
Country	Rice	Paddy	Country	Rice	Paddy
	Cwts.	Cwts.		Cwts.	Cwts.
Burmah...	1,590,727	46,908	Ceylon ...	1,063,656	43,250
Bengal ...	37,245	5,503	Straits Settlement		
Karachi ...	4,914	...	and F. M. S. ...	21,194	...
Bihar ...	1,449	8,365	Other countries ...	2,620	...
Bombay...	589	...			
Straits Settlement ...	171	...			
Mauritius ...	50	..			
Total ...	1,635,145	60,776	Total ...	1,087,470	43,250

EXPORT OF BONES, HORNS, OIL-CAKES AND OIL-SEEDS FROM THE MADRAS PRESIDENCY IN 1925.

Country to which exported	BONES		OIL-CAKES			OIL SEEDS					HORNS	
	Tons		Ground-nut	Castor	Gingelly	Others	Ground-nut	Castor	Gingelly	Others	Cwts.	Cwts.
			Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.		
Ceylon	...	6,034	330,626	24,674	355,352	...	124	...	2,947	2,823	...	...
France	...	1,000	...	...	...	...	2,986,105	20,972	33,244	32,442	...	302
Belgium	...	428	...	...	...	...	209,657	16,375	...	703	...	6,254
Germany	...	30	31,280	...	355	22,579	965,840	...	8,356	10,636	...	5,632
United Kingdom	3,699	...	...	...	498,430	1,200	5	20,246	...	12,031
Netherlands	402	...	...	...	1,357,791	...	9,422	899	...	661
Italy	389,163	...	...	...	...	331
Straits Settlements and F.M.S.	13,685	...	239	...	...	...	...	...	...	...
Spain	200	...	...
U.S. America	276,607	...	...	...	...	...
Java	419,390	...	...	...	...
Egypt	8,486	...	...	...	...	...	...	200	...	...
Other Countries	1,255,988	...	...	...	...	...
	5	11,893	...	10	6,645	...	...
Total 1925	7,492	388,178	...	24,674	355,946	22,584	7,951,598	457,937	53,997	74,794	25,211	...
Total 1924	9,603	299,572	...	66,352	207,559	27,484	5,669,988	442,368	33,475	22,580	20,148	...
Total 1923	16,797	399,487	...	12,450	97,359	144,897	4,329,598	667,611	5,588	5,531	16,122	...

DISTRICT ASSOCIATION MEETINGS

ANAMALLAI PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of an Extraordinary General Meeting held at the Anamallai Club,
on Wednesday, February 10, 1926, at 2 p.m.

Present

Messrs. F. Simmons (*Chairman*), J. Hatton Robinson, J. H. Ireland-Jones, A. C. Cotton, C. L. Napier, G. A. LeMesurier, E. H. Beldnell, S. Sladden, B. L. John, W. H. Martin, D. Cooper, H. Rogers, E. W. Simcock, R. Mc. M. Sweet, B. D. Darkin and J. E. Sampson (*Honorary Secretary*).

Minutes.—The Minutes of the Extraordinary General Meetings, (2), held on January 2, 1926, having been circulated by post, were taken as read, and confirmed.

The Minutes of the Meeting of the General Committee, held on January 21, 1926, were read and confirmed.

Election of New Members.—The following gentlemen were duly elected personal Members of the Association:—

Dr. Horrocks, proposed by Mr. Cooper and seconded by Mr. Martin (*Honorary*);

Mr. C. Elsner, proposed by Mr. John and seconded by Mr. Cooper;

Dr. Johnson, proposed by Mr. Simmons and seconded by Mr. Le Mesurier (*Honorary*);

Mr. Marshall, proposed by Mr. Sladden and seconded by Mr. Hutton Robinson;

Mr. H. W. E. S. Rogers, proposed by Mr. Sampson, and seconded by Mr. Simmons; and

Dr. Measham, proposed by Mr. Sladden and seconded by Mr. Sampson (*Honorary*).

Seeth-Gundy (Nelliampathy), Ghaut Road.—Read letters from Mr. A. P. Kinloch, dated January 16 and 26, 1926, requesting the assistance of the Association with reference to improvements to the only road available for the Nelliampathy District.

The meeting directed the Honorary Secretary to put in definite proposals as to the work needed, such proposals to be in the form of a resolution to be placed before the next General Meeting, in addition it was considered necessary that Mr. Kinloch should provide information as to the present condition of the road, copies of any correspondence which may have passed between himself and the authorities *anent* the road, etc.

Renewal of Leases.—This matter was thoroughly discussed in Committee, and the following resolution, proposed by Mr. Cooper, and seconded by Mr. Hatton Robinson, was duly carried unanimously:—

‘That copies of correspondence regarding renewal of leases, brought forward by the Peria Karaimallai Tea and Produce Co., Ltd., be circulated to Managers of Estates in the Anaimallais, for forwarding, if necessary, to their Principals, for their information, and for favour of their opinions.

Ropeway.—Read letter from the Collector of Coimbatore, Reference No. 7468/25-C-3, January 20, 1926, *anent* Section 39 of the Land Acquisition Act.

Read letters from the English Electric Co., Ltd., Madras, February 1 and 5, 1926, together with the Honorary Secretary's reply of the 8th idem, and his letter to Mr. J. B. Adkins of the same date.

Mr. Simcock suggested that, failing a reply by wire from Mr. Adkins, the Honorary Secretary should refer to the Manager of Waterfall Estate: this suggestion met with the approval of the meeting.

Mr. Robinson explained that the re-survey of the proposed Ropeway would probably be completed this day, and that it had been found possible to omit the angle stations between the 12th mile and Iyerpadi.

The Chairman asked for details as to the amount of land it would be necessary to apply for, in Waterfall Estate, and Mr. Robinson undertook to request Messrs. James Finlay & Co., Ltd., to supply this information at an early date.

Meeting of U. P. A. S. I. General Committee.—Read notice from the Secretary, U.P.A.S.I., calling a meeting of the General Committee of the U.P.A.S.I., at Ootacamund, February 23, 1926, at 11.30 a.m. The Agenda was discussed item by item, and the Association's representative has directed to use his own discretion in any matter. With regard to item No. 7, the Labour Department, Mr. Cotton spoke with reference to the inadequate salaries of certain of the Staff of the Department, and the need for improvement of the terms on which the Staff are engaged. The Delegate was requested to bear this in mind.

Chatrams.—With reference to the Chatram at Mile 21.4, and the opinion expressed by the General Committee at its last meeting, the Honorary Secretary advised the meeting that Mr. Diaper had been unable to let the Chatram to the neighbouring bazaarman, but that Lower Paralai Estate would be prepared to rent the Chatram at the rent suggested when offering the building to the bazaarman.

Mr. Hatton Robinson enquired where it would be considered necessary to place a Chatram to take the place of this building: the meeting did not consider another Chatram necessary at present.

The meeting was in agreement with the opinion of the General Committee, and the following resolution proposed by Mr. Cooper, and seconded by Mr. John, was carried unanimously:—

'That the Chatram at mile 21.4 be offered to the Lower Paralai Estate 'at a rent of Rs. 72 per annum, the estate to be responsible for its being 'kept in proper repair: or that, as an alternative, Lower Paralai Estate be 'asked if it will purchase the Chatram, and, if so, at what figure.'

Correspondence—Railway.—Read and recorded letter from Mr. H. W. Perry, Consulting Engineer, Trichinopoly, December 9, 1925, to the Chairman.

Read and recorded notice of a meeting of the Guarantors of the Survey, to be held at Ootacamund, on February 24, 1926, at 10.30 a.m.

Read and recorded copy of letter from the Second Secretary to the Government of Madras, Public Works Department, to the Secretary, U.P.A. S.I., No. 727 E/25-11, February 1, 1926, and similar letter No. 727 E/25-10, January 9, 1926.

Township.—Mr. Ireland-Jones spoke as to the need for a water supply on the Township, for the various buildings.

Mr. Cotton suggested that the first move in this matter should be made by the Anamallai Medical Association, in consultation with the Anamallai

Club: also that it would be of advantage to allow the matter to stand over until the completion of the Police Quarters now being built.

This suggestion was agreed to.

Tea Brokers' Sales Reports.—Mr. Ireland Jones, seconded by Mr. Cooper, proposed the following resolution, which was duly carried unanimously :—

'That, in view of the area this District now covers, and the number of Tea Estates sending Home tea for sale on the London Market, this Association shall take up the matter with the Tea-Brokers' Association in London; submitting a list of the names of all Tea Estates in the Anaimallais, and requesting them to arrange, in future, to publish the Tea Sales of any or all of these Estates under the one heading of Anaimallai District in the various sales reports issued.'

Planters' Benevolent Fund.—Read letter from Mr. A. C. Cotton, dated February 5, 1926, and the Honorary Secretary's reply of the 6th idem. The Honorary Secretary explained that he had hopes of being able, in the near future, to report the usual 100 per cent of Members subscribing to the Fund.

Mr. Robinson asked for particulars to payments made in a certain case in which this District is interested, Mr. Cotton giving the necessary information.

Combined Control Committee.—Mr. Cooper, Control Committee Member for Srivilliputtur Division, read letter from the Director of the Labour Department, No. Oh/50 of February 5, 1926, with reference to a resolution to be proposed by the Kanan Devan P. A., *anent* the composition of Control Committees.

Mr. Cooper pointed out this District's objection to the proposed new rule, and the Control Committee Members of both Srivilliputtur and Coimbatore Divisions were directed to vote against it.

Coimbatore Control Committee.—Mr. Sampson as Control Committee Member for Coimbatore Division, referred to the report of the Director of the Labour Department on his inspections during the past two months. It was decided that copies of this report should be circulated.

U. P. A. S. I. Sports Club.—Mr. Cooper advised the Meeting as to the representatives of this District at the coming 'Ooty Week', as follows :—

Tennis.—Messrs. Collett and Danagher.

Golf.—Messrs. Bulteel and Cooper.

Election of Office Bearers.—In view of the approaching departure on furlough of Mr. Simmons, the following elections took place :—

Chairman.—Mr. J. E. Sampson.

Honorary Secretary.—Mr. D. Cooper.

To General Committee.—Mr. Hatton Robinson.

These gentlemen thanked the meeting for the honour done them.

Before the close of the meeting, Mr. Ireland-Jones referred to the work done by Mr. Simmons, during his tenure of office, and asked for a very hearty vote of thanks. Applause. Mr. Simmons replied in fitting terms, thanking the General Committee for their assistance, and Honorary Secretary for his invaluable help at all times, and urging more interest in Association affairs on the part of the younger and more recently arrived Members of the District.

J. E. SAMPSON,
Honorary Secretary.

F. SIMMONS,
Chairman.

DISTRICT NOTES

A. North Coorg

The Annual Coorg Race Meeting was held at Mercara on February 16, and 18.

Some excellent finishes were witnessed on the first day. Four horses faced the starter for the hurdle race, the favourite 'Colonel' being beaten by a length by 'Foxtrot'. The $2\frac{1}{2}$ furlong pony scurry was most exciting. 'Romulus' ridden by the experienced veteran Mr. Cox got away with three lengths' start but was caught coming into the straight by 'Mighty Atom' who won by the shortest of short heads. In the third 'Artemis' who had received but little training led from the start, was challenged from the distance post by Baronet, and a thrilling race down the straight resulted in a Dead-heat. The 5 furlong pony race was an easy win for 'Romulus.' In the last race of the day 'Melenora' was hot favourite but the greatly improved form of 'Colby' enabled the latter to win by half a length.

The second day provided a card of six events. In the first 'Baronet' was well away from the start to win from Melenora by two lengths. Of the second Division Horses 'Ginger' proved an easy winner both in 4 furlongs and the mile. In the mile for 1st. Division Horses the backers of 'Melenora' were again disappointed Colby again winning by a good length with 'Colonel' coming up in the last few strides for second place. Of the Ponies 'Mighty Atom' again showed his superiority over 3 furlongs and 'Romulus' over 5 furlongs.

From a financial as well as from a sporting point of view the Meeting has proved a great success. The Lottery Dinners were well attended and the bidding spirited. Messrs. Dickinson, Robinson and Wright are to be congratulated on the result of their efforts.

FEBRUARY 16

The Jeppo Cup. (Presented by Messrs. Peirce, Leslie and Co.)

Hurdle Race for horses. $1\frac{1}{4}$ mile. Catch weights 11-7.

Mr. C. S. Iron's	FOXTROT	Owner	1.
Mr. Nanjappa's	COLONEL	Mr. Davies.	2.
Mr. A. Nicoll's	GINGER	Owner	3.
Fiancée fell.			

The Maracoon Plate. (Presented by Messrs. Volkart Bros.)

Pony Scurry. $2\frac{1}{2}$ furlongs. W. I. 14-2 to carry 11-7

Mr. A. Davies'	MIGHTY ATOM	Owner	1.
Mr. J. Maurice's	ROMULUS	Mr. Cox	2.
Mr. Dickinson's	RHODA	Mr. Nicols	3.

Also ran Foxglove, Billie, Mary.

The Chonadhum Cup. (Presented by Messrs. Peirce, Leslie and Co.)

Horse Race. 4 furlongs. Catch weights 11 st.

Mr. J. Maurice's	BARONET	Mr. Cox	1. DH.
Mrs. Morgan's	ARTEMIS	Mr. Davies	1.
Mr. A. Nicoll's	GINGER	Owner	2.

Also ran Wallad, Fiancée.

The Pullacoon Cup. (Presented by Messrs. Aspinwall and Co.)

Pony Race. 5 furlongs. W. I. 14-2 to carry 11 st.

Mr. J. Maurice's	ROMULUS	Mr. Cox	1.
Mr. Dickinson's	RHODA	Mr. Nicolls	2.
Mr. Sprott's	FOXGLOVE	Owner	3.

Also ran Parchment, Suzanna, Lady Madcap.

The Bolloor Cup. (Presented by Messrs. Saldanha and Sons.)

Horse Race. 1 mile. Catch weights 11 st.

Mr. C. S. Iron's	COLBY	Owner	1.
Mr. Rasul Khan's	MELENORA	Mr. Nicolls	2.
Mr. Nanjappa's	COLONEL	Mr. Davies	3.

Also ran Baronet, Sandy Bay.

FEBRUARY 18

The Spencer Cup. (Presented by Messrs. Spencer & Co.)

1st. Div. Horse Race. 4 furlongs.

Mr. J. Maurice's	BARONET	11-3	Owner	1.
Mr. Rasul Khan's	MELENORA	11-12	Mr. Nicolls	2.
Mr. Nanjappa's	COLONEL	10-7	Mr. Davies	3.

Also ran Colby, Artemis.

The Beer Mug. (Presented by J. W. Irwin, Esq.)

2nd Division Horse Race. 4 furlongs.

Mr. A. Nicolls'	GINGER	11-0	Owner	1.
Mr. J. Sprott's	FIANCEE	11-7	Mr. Cox	2.
Mr. D. Mahon's	WALLAD	10-0	„, Humphries	3.

The Sakamma Cup. (Presented by Mrs. Sakamma)

Pony Race 3 furlongs.

Mr. A. Davies'	MIGHTY ATOM	11-7	Owner	1.
Mr. J. Maurice's	ROMULUS	10-4	Mr. Cox	2.
Mr. Dickinson's	RHODA	10-0	Mr. Nicolls	3.

Also ran Parchment, Billie, Lady Madcap, Foxglove.

The Abial Cup. (Presented by M. Rasui Khan Sahib, M. L. C.)

1st Division Horse Race. 1 mile.

Mr. C.S. Iron's	COLBY	11-12	Owner	1.
Mr. Nanjappa's	COLONEL	10-0	Mr. Davies	2.
Mr. Rasul Khan's	MELENORA	11-5	Mr. Nicolls	3.

Also ran Baronet, Foxtrot.

The Drimnin Cup. (Presented by Messrs. Maclean and Macrae.)

2nd Division Horse Race. 1 mile.

Mr. A. Nicolls'	GINGER	11-0	Owner	1.
Mr. J. Sprott's	FIANCEE	11-7	Mr. Maurice	2.

The Orr Cup. (Presented by Messrs. P. Orr & Sons.)

Pony Race. 5 furlongs.

Mr. Maurice's	ROMULUS	10-7	Mr. Cox	1.
Mr. Davies'	MIGHTY ATOM	11-0	Mr. Morgan	2.
Messrs. Noweson	PARCHMENT	10-7	Mr. Davies	3.
And Kirkbride's	(late Timothy)			

Also ran Rhoda, Suzanne, Foxglove.

The Races were held early this year in order to enable those who could go to Ooty for the Planters' Week. Many are going Home from Coorg this year, so that the Mercara Week could not be held at the usual time in April.

On the day between the Races the annual Cricket Match between North and South Coorg took place. South Coorg, thanks to the contempt with which Messrs. Carroll and Harper treated the bowling of the North, put up a total of 207. They then dismissed the North for 144 runs winning by a comfortable margin. The feature of the match was the excellent innings of Mr. Cox, the oldest player, who scored 74 for North Coorg.

The curtailed 'week' ended on February 19 with a tennis tournament, the winners being :—

Men's Doubles	...	...	Rev. Mr. Brunt and Mr. Lee.
Mixed	,,	...	Rev. and Mrs. Brunt.

' A. P. '

B. South Coorg

TENNIS TOURNAMENT (FINALS)

Men's Singles—

C. A. Reid *beat* D. M. Tew.

Men's Doubles (American)—

B. St. J. Boulton and J. B. Reid ... 41 games.

CRICKET

A full day's match was played at Mercara on the 17th instant. South Coorg *versus* Mercara. Both teams fielded strong sides; and a good game resulted in South Coorg being the winners.

Scores.—South Coorg 207. (Lieut. Caryll 73, Harper 65 being top scorers): Mercara 168 (Cox 74). The weather kept fine, and a large number of spectators were present.

February 22, 1926.

YOUR HONORARY CORRESPONDENT.

LETTERS TO THE EDITOR

Motor Mileage

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

Mr. Brock in his letter of January 26 in your issue of February 13 gives some figures in support of the 'high cost of running gang' that seem incredible. In 2 years and 9 months he paid in repairs and renewals alone the present cost price of a Ford 'ready for the road'! I think most will agree that Mr. Brock was evidently unfortunate enough as to get a 'dud' machine, and it is surprising he did not dispose of it in the first 6 months or year. Can one go by such an exceptional case, I think not? Mr. Brock may not agree that the case is exceptional, but I for one could not afford a car at that ruinous cost, and I am sure the Ford would not be so universal were it the case. Everyone has heard the jokes about Fords falling to bits but really they aren't as bad as all that!

I have had my Ford for a year, but regret as I 'run my own car' and therefore have no speedometer or self-starter I am unable to give the mileage. It is extensive and done over the worst roads made by man.

The repairs and renewals extend to 2 front springs, 1 roller bearing, 1 lamp glass, 3 new bands. A mere bagatelle when compared to Mr. Brock's one-fifth of cost price of the present Ford!

It would be interesting to hear the views of other Ford owners, if they are not too alarming!

BALEHONNUR,
KADUR,
February 20, 1926.

Yours, etc.,
G. V. R. FREND.

Motor Mileage

THE EDITOR,
'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

I have read Mr. Brock's letter in your issue of 13th instant giving his experience of his annual repairs to his Ford. The figures he gives are staggering, and I think that there will be few but will admit that Mr. Brock must have been sold a 'Dud' when he bought her?

I have had a Ford for the past two years, and have run her over eight thousand miles on all sorts and conditions of roads, and my repair bills amount to one set of new bands, one front spring, one glass for one of my head lights, and a bottom glass for my wind screen. The cost what? about 50/-!!!

Apparently Mr. Brock's Ford instead of being one of the cheapest cars to run (as is universally admitted) is one of the most expensive. It is admitted that a Ford is a poor man's car, but you would need to be anything but poor to run a car like Mr. Brock's, as his bills do not include petrol or tyres or a man to give her an occasional wash. I know I should not own a Ford if I had repair bills such as Mr. Brock gets, in fact I should have given her away with a pound of tea after a very few months of ownership.

I note the figures he gives does not include extra 'gaggets,' I wonder if these extra 'gaggets' which he apparently has, has anything to do with the extraordinary bad wear and tear his car appears to get? Anyhow I would suggest to Mr. Brock that he sold his Lizzie and bought a new one and I think he would find his repair bills would be nearer 25/- than 75/- as at present. Subscribers to the Labour Department cannot possibly afford to pay high mileage allowance because of the high repair bills of some of the officials of the department which must be very exceptional cases.

Yours, etc.,
E. H. YOUNG.

P.S.—I may of course have bought a sparking plug or two and other trifles like that.

SOONDHULLY ESTATE, BELEGODU,
February 19, 1926.

E. H. Y.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

EXPORTS OF TEA, COFFEE & RUBBER FROM SOUTH INDIAN PORTS DURING DECEMBER, 1925

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Tea—</i>								
Madras	1,568	...	145,756	20	739	...	...	...
Calicut	55,579	68,447	1,054,668	...	...	800	13,575	...
Cochin	16,123	30,977	846,609	...	...	450	...	...
Tellicherry	1,730	...	148,538	...	...	...	...	...
Tuticorin	...	333,011	1,141,553	...	...	...	...	...
Alleppey	...	13,440	102,260	...	...	...	...	...
Total	75,000	445,875	3,439,384	20	739	1,250	13,575	...
Previously	267,281	2,691,947	25,149,553	1,058,341	8,580	4,645	65,153	1,850
Total lbs. since 1-4-25.	342,281	3,137,822	28,588,937	1,058,361	9,319	5,895	78,728	1,850
<i>Coffee—</i>								
Madras	288	...	...	...	2	...	...	...
Calicut	...	...	437	...	...	...	...	...
Mangalore	205	...	539	2,489	167	...	...	152
Tellicherry	...	...	973	127	...	...	...	...
Bombay	...	...	...	...	450	...	...	...
Total	493	...	1,949	2,616	619	...	...	152
Previously	17,374	35	113,233	113,273	30,139	1	503	7,833
Total cwts. since 1-1-25.	17,867	35	115,182	115,889	30,758	1	503	7,985
<i>Rubber—</i>								
Calicut	...	127,981	136,832	22,027	...	...	...	...
Cochin	...	224,852	255,144	2,310	...	...	306,705	...
Mangalore	...	41,574	...	...	...	...	...	...
Tellicherry	...	...	48,940	...	...	...	...	...
Tuticorin	...	167,655	11,164	...	...	...	...	...
Alleppey	...	189,802	47,715	14,169	...	...	...	...
Total	...	751,864	499,795	38,506	...	...	306,705	...
Previously	3,170	5,577,222	4,993,761	170,599	1,463	25,694	1,582,136	...
Total lbs. since 1-1-25.	3,170	6,329,086	5,493,556	209,105	1,463	25,694	1,888,841	...

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending February 20th, 1926

Bank Selling Demand Draft on London

15th	16th	17th	18th	19th	20th
18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 5/32d.	18 1/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market				Average prices obtained for tea			
Mark	Pkgs.	Price		District	Week ending January 30, 1926	January 1 to January 30, 1926	January 1 to January 30, 1925
TEA (WEEK ENDING JANUARY 30, 1926)		s.	d.		s. d.	s. d.	s. d.
(a) Anamallais—				N. India	1 9·26	1 8·80	1 8·57
Mukkottumudi ...	201	1	10½	S. India	**1 9·55	††1 9·45	††1 8·30
Selalipara! ...	92	1	10½	Ceylon...	1 10·20	1 10·20	1 9·68
Nadu Arr ...	119	1	10	Java ...	1 5·23	1 5·23	1 4·38
Pannimade ...	238	1	9¾	Sumatra.	Nil	1 6·73	1 7·80
(b) Central Travancore				Nyassa-land.	1 7·52	1 4·20	1 5·53
Stagbrook ...	106	1	11	Total ...	*1 9·33	†1 9·11	†1 8·55
Glenmary ...	77	1	9¾				
Caradi Goody ...	98	1	9¾				
Thungamallay ...	91	1	9½				
(c) Kanen Devans—							
Chundavurrai ...	166	2	0¼				
Periavurrai ...	234	1	11¾				
Letchmi ...	160	1	11¾				
Kalaar ...	146	1	9½				
(d) Mundakayam—							
Orkaden ...	118	1	8				
(e) Nilgiris—							
Prospect ...	128	2	2				
Bhawani ...	123	2	0				
Terramia ...	71	1	10½				
Mailoor ...	80	1	9¾				
(f) Nilgiri-Wynaad—							
Woodbriar ...	122	1	10¼				
New Hope ...	144	1	9				
(g) South Travancore—							
Merchiston ...	72	1	8½				
Poonmudi ...	119	1	8				
Braemore ...	46	1	7½				
(h) Wynaad—							
Chulika ...	85	1	7				
Elstone ...	120	1	7¼				
Erramaculla ...	190	1	7½				

(b) SPECIAL COFFEE CABLE

LONDON, WEDNESDAY, FEBRUARY 24, 1926

'A' COFFEE

145s. PER CWT.

MARKET QUIET

(c) RUBBER

The London quotation for Plantation first Latex Crepe on Monday, February 22, 1926, was 28½d.

** Based on 5,091 packages.

†† „ „ 21,002 „

†† „ „ 17,893 „

* Based on 76,065 packages.

† „ „ 323,765 „

† „ „ 279,069 „

Précis of Reports on the London Markets received on Monday, February 22, and covering the week ending Saturday, January 30 :—

(1) *Tea*.—The upward tendency, upon which we commented last week, was still strongly evident on Monday, January 25; but there was a certain amount of reaction at the Wednesday's sale; and, though the best teas showed no decline, mediums and commons evidenced a slight falling off in price. The net result, so far as South India is concerned, was a falling off in the average of 0·2*d*.

(2) *Rubber*.—On Saturday, January 30, Spot Plantation first latex crepe was 33*d*. as against 34*d*. on the previous Saturday; although during the week the stocks decreased by 199 tons from 10,136 to 9,937 tons. As the end of January saw the termination of restriction on the export of Standard Production, the current year's crop will presumably be the biggest on record; and, since the incidence of demand does not always synchronize with that of supply, apparent surpluses with consequent falling off in price are likely to occur from time to time. On the other hand since all estimates agree that the total supplies will show but a small—and perhaps no—excess over the total requirements for year; it is quite possible that the consumers may at times have to fight for their supplies, and that there will be consequently temporary shortages of 'Spot'.

(3) *Coffee*.—On Tuesday, January 26, the first arrival of South Indian Crop was catalogued. The amount offered was 469 bags from the Shevaroyes which were withdrawn and 63 bags from Polibetta Coorg which realized an average of 137*s*. 6*d*. The London Market anticipates that crops of all descriptions, except East Indians, will probably be larger than those of the last season; and consequently has no apprehension with regard to future supplies.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, February 20, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	N.R.	N.R.	N.R.	19. Coonoor ...	...	92·31	92·31
2. *Tenmalai.	...	103·25	103·25	20. Kotagiri ...	...	71·55	71·55
3. Mundakayam.	N.R.	N.R.	N.R.	21. Ootacamund	...	53·19	53·19
4. *Peermade.	...	173·67	173·67	22. Yercaud ...	...	55·55	55·55
5. Twyford ...	N.R.	N.R.	N.R.	23. Devala ...	...	132·24	132·24
6. V'periyar	81·67	81·67	24. Gudalur ...	...	74·65	74·65
7. Kalaar	212·34	212·34	25. CALICUT ...	...	134·54	134·54
8. Chittuvurrai	...	64·05	64·05	26. Kuttiyadi ...	...	179·44	179·44
9. BODI'KANUR	...	28·27	28·27	27. Vayittiri ...	...	160·31	160·31
10. COCHIN	110·85	110·85	28. Manantoddi.	...	110·87	110·87
11. *Mooply	116·21	116·21	29. Billigiris ...	...	69·19	69·19
12. MooplyValley	...	125·89	125·89	30. *Sidapur ...	...	74·44	74·44
13. Pachaimalai	...	124·05	124·05	31. Pollibetta ...	...	85·66	85·66
14. Maudis	202·53	202·53	32. Somwarpett	...	86·14	86·14
15. POLLACHIE.	...	30·18	30·18	33. Ballupete ...	N.R.	N.R.	N.R.
16. Manjeri	126·58	126·58	34. MANGALORE.	...	139·40	139·40
17. Nilambur	101·26	101·26	35. MADRAS ...	...	63·35	63·35
18. Naduvattam	...	84·32	84·32				

W = During the week. P = Previously. N.R. = No Return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 10]

SAT., MARCH 6, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	153	Malaria by Sir Ronald Ross ...	165
Royal Commission on Agriculture ...	154	Letters to the Editor—	
U.P.A.S.I. General Committee Meeting ...	155	Toll Gates ...	166
U.P.A.S.C. Planters' 'Week' Results ...	162	Commercial and Meteorological ...	167

EDITORIAL NOTES

Corrigendum We very much regret that through a clerical error 'Gibbon, H.' was mutilated to 'Gibson, H.' under 'Central Travancore' in the list of members of the U.P.A.S.I. Sports Club which we published on page 59 of our issue of January 23rd, and we tender our apologies to Mr. Gibbon, Mr. Fulcher, and others concerned for any inconvenience or annoyance which they may have been caused by this mistake.

Mysore State Railway The Mysore Government, through a notification of its Publicity Officer dated February 25, 1926, announces that it has sanctioned the construction of a Railway Line from Chickmagalur to Kadur. Part of the construction cost is to be borne by the Kadur District Board which has agreed to make over to the Government the accumulated surplus of its Railway Cess. The Board has also consented to continue to levy the railway cess for another 25 years and to compensate Government to the extent of the proceeds thereof for any loss which may accrue if the Railway fails to pay its way. On the other hand if a profit eventuates; the surplus funds—after the interest on the capital sunk by Government in the line has been met—will be available for further railway projects in Kadur.

Agricultural Alchemy Professor F. Garelli of Turin, as a result of research work undertaken at the request of the Italian Government into possibilities of discovering fresh sources of manures, has succeeded in preparing a fertiliser which he calls 'Nitrated Peat' (consisting of 42·8 per cent Nitrate of Ammonia, 20·6 per cent Organic Matter, 18·8 per cent Ash, and 17·8 Water) from high explosives containing Nitrate of Ammonia by dissolving them in a definite quantity of water and introducing into the solution Powdered Peat. The Nitrogen content of the fertiliser is 16·4 per cent, and Professor Gamacchio, Director of the Provincial Chair of Agriculture at the University of Turin reports, after extensive experiments in the Alba District, that it gives results approximating to those obtained where Nitrate of Soda is employed. We have, as yet, however, no information as to whether the new product is likely to compete with the well established Nitrate of Soda as regards price as well as as regards results.

THE ROYAL COMMISSION ON AGRICULTURE

The preliminary negotiations between the Government of India and the Secretary of State with reference to the formation of a Royal Commission of Agriculture were outlined in a *Gazette of India* published last week. The original proposal came on November 13, 1925, from the Government of India ; which advised the Secretary of State by cable that on further consideration it had come to the conclusion that the Central Board of Agriculture adumbrated by the Viceroy at the opening of the Central Legislature in August, 1925, would not be sufficiently detached or authoritative to deal satisfactorily with the Agricultural problem as a whole ; and that as a consequence only a Royal Commission would meet the case. The Secretary of State approved of the proposal in principle by a telegram, dated November 20, 1925 ; and subsequent pourparlers as to details resulted in the following terms of reference which were announced by the Viceroy to the Legislative Assembly on January 20, 1926 :—

‘ Generally—

To examine and report on the present conditions of agriculture and rural economy in British India and to make recommendations for the improvement of agriculture and the promotion of the welfare and prosperity of the rural population ;

and in particular, to investigate—

- (a) the measures now being taken for the promotion of agriculture and veterinary research, experiment, demonstration and education, for the compilation of agricultural statistics, for the introduction of new or better crops and for improvement in agricultural practice, dairy farming and the breeding of stock ;
- (b) the existing methods of transport and marketing of agricultural produce and stock ;
- (c) the method by which agricultural operations are financed and credit afforded to agriculturists ;
- (d) the main factors affecting rural prosperity and the welfare of the agricultural population and to make recommendations.’

The Gazette referred to at the commencement of this Article makes it clear that the Commission is excluded from taking cognizance of (as opposed to making recommendations on) the questions of land-ownership and tenure, revenue assessments and irrigation charges to which the witnesses under examination will inevitably refer. The Viceroy’s speech itself stated that the personnel of the Royal Commission would include members both from outside India with experience of agriculture in other lands and from within India with peculiar knowledge of Indian Agriculture and Rural Economy and of the ryots’ especial needs. It also emphasized that there was no intention of encroaching on the jurisdiction of the various local governments whose activities required to be supplemented, not curtailed.

The proceedings of the Committee will be watched with sympathetic interest by the Planting Community ; not only because some of the findings may affect its members more or less directly, but also and chiefly because they realize more readily than the average town dweller that the agriculturists are after *the* important section of the populace and that their welfare and economic enfranchisement must be a matter of primary concern to all who have the real interests of the country at heart.

Our only apprehension is that the Commission will be handicapped by the exclusion of land tenancy from its terms of reference ; for, save in the Punjab and the Central Provinces, Government efforts to ensure security of tenure—especially in Madras, Bombay, and Burma and to a lesser extent in the United Provinces, Bengal, and Behar—seem to have met with but scant success. The protected tenant tends to become a landlord and a middleman letting instead of cultivating his land ; so that the tenant *de facto* becomes impoverished and rackrented while the tenant *de jure* thrives. The uneconomic small holding also appears a formidable obstacle ; for in this economically conservative but politically ultra-radical country any effort to substitute primo-geniture for the Joint Family System would be very strenuously opposed.

UNITED PLANTERS' ASSOCIATION OF SOUTHERN INDIA

GENERAL COMMITTEE MEETING

Proceedings of a Meeting of the General Committee of the United
Planters' Association of Southern India held at the Masonic Hall, Ootacamund,
on February 23, 1926

Present

Mr. R. Fowke	...	<i>Chairman.</i>
Capt. E. G. Windle, M.L.C.	...	<i>Planting Member.</i>
Mr. A. C. Cotton	}	... <i>Members of the</i>
Mr. J. J. Murphy		
		... <i>Executive Committee.</i>
Maj. C. H. Brock, O.B.E., V.D.	...	<i>Director, The Labour Department.</i>
Mr. H. Waddington	...	<i>Secretary.</i>

and the following members

Association

Represented by

Anamalais	...	Mr. D. Cooper.
Central Travancore	...	Mr. W. F. Inman.
Coorg	...	Messrs. J. B. Reid and W. R. Wright.
Kanen Devans	...	Messrs. F. Hawkins and J. S. B. Wallace.
Mundakayam	...	Mr. E. S. Conner.
Mysore	...	Mr. C. Lake.
Nilgiris	...	Mr. P. Reed.
Nilgiri-Wynaad	...	Messrs. J. Aird and G. W. Fulcher.
South Travancore	...	Mr. A. P. D. Lodge.
Wynaad	...	Mr. B. M. Behr.

Before the meeting opened an informal discussion took place regarding the holding of business meetings during the Planters' Week. Mr. Murphy supported by Mr. Cooper urged that in future such meetings should not be held at Ootacamund during the Sports Week, as they interfered with men being able to play when wanted for the various tournaments. Mr. Lake opposed the proposal as men could not get away for meetings at Madras and also attend the Sports Week at Ootacamund. Capt. Windle suggested that in future business meetings should be confined to a day specially set apart for them.

By order of the Chairman the Secretary read the proceedings of the last meeting, held at Bangalore on August 21, 1925 and they were confirmed.

Budget, 1926-1927

Copies were circulated to all members present, and the Secretary pointed out the addition made the day previously by the Executive Committee : Rs. 500 having been added to estimated expenditure on the Tea Experimental Station in order to allow of an extension of five acres being planted during the next monsoon and a similar amount having been brought into Income account from the unspent balance of previous years' Tea cess.

Mr. Murphy protested against the inclusion in the Budget of Rs. 12,000 under the heading of Political representation, and pointed out that Indian States were now following the lead of the Madras Presidency to a very small extent, and that although the amount had been included in three Budgets it had not been found possible to obtain the services of a suitable man.

Mr. Behr enquired what was being done and what progress had been made in connection with the new Tea Station.

The Chairman explained that the Rs. 500 which the Executive Committee had added to the budget was to enable an extension to be planted during the next monsoon, the original estimate having been drawn up with a view to clearing land which would only be planted during 1927. That as regards buildings, although there had been unavoidable delay, it was hoped to complete the Bungalow, Coolies Lines, and Farm Manager's House before next June ; and that although the plan of the Laboratory was not yet ready it was expected within the next few days. The difficulty was as regards the roofing of these buildings and it was now being considered whether they could not be put on timber rafters instead of iron as previously intended.

Mr. Aird asked what timber it was proposed to use.

The Chairman. Karimarathu.

Mr. J. B. Reid asked what the estimate of Rs. 1,100 for the Sidapur Coffee Station represented, he understood that Dr. Coleman had asked that the Station be continued till his return.

The Chairman said the estimate was for carrying on the Station to the 30th June next.

Mr. Murphy said that the Mundakayam Association would object to the increase in the cost of the Head Office.

The Secretary explained that the work of the Association was constantly increasing, and it was impossible for him to get through the work without an assistant. This was more particularly so since the publishing of the *Chronicle* had been added to the Head Office work.

Mr. Conner supported Mr. Murphy as regards the estimate for Political representation. He agreed that Indian States were less and less following the policy of Madras and considered that Associations in Indian States would benefit in no way from such expenditure.

The Secretary explained that the matter had been under consideration of the Executive Committee on the previous day, and it was thought that as this item had been passed by a General Meeting of the Association it ought to be included until another General Meeting rescinded it.

Mr. Lake suggested that notice should be sent the Chamber of Commerce that the budget allotment for this purpose would be withdrawn.

Mr. Cotton pointed out that the opposition was from Associations in Indian States and he would be glad to hear the views of Wynaad and other Associations in British India.

Mr. Behr said that Wynaad had not considered the matter recently and he could not say what its present view was.

Mr. Aird said the position was similar in the Nilgiri-Wynaad, which had not reconsidered the matter and he believed that Association was prepared to stand by the allotment.

Mr. J. B. Reid said the position in Coorg was the same as that of the Nilgiri-Wynaad Association.

Mr. Behr said that if *Mr. Murphy* and *Mr. Conner* are right in their view that Indian States are not influenced by the proceedings of the Madras Government it would alter the point of view hitherto held in his District.

Mr. Lake asked for the views of the present Planting Member.

Capt. Windle explained the position in the Legislative Council and said he did not consider that the addition of an extra representative would be of material benefit.

The Secretary in answer to a request from *Mr. Murphy* read the resolution passed at the annual General Meeting in 1924, which was as follows :—

‘ That this Association agrees to subscribe the sum of Rs. 1,000 per mensem towards the salary and expenses of the leader of the European Non-Official party in the Madras Legislative Council.’ And in reply to further enquiries informed the meeting that the area in Native States supporting the Association was 84,999 acres as compared with 92,023 acres in British India.

Mr. Behr was of opinion that the matter ought to be referred to a General Meeting of the Association.

Proposed by *Mr. Murphy* and seconded by *Mr. Lake* :—

‘ That notice be given to the Madras Chamber of Commerce, the ‘ Madras Trades’ Association and the European Association that ‘ unless a suitable man can be found within six months to act as ‘ our paid representative on the Madras Legislative Council the ‘ Association holds itself free to withdraw from the arrangement ‘ made in 1924.’

Carried.

The Chairman. Unless any other delegate has further to say on the matter of the Budget I will propose from the Chair

‘ That the Budget as amended by the Executive Committee and ‘ placed before this meeting be adopted.’

The resolution was put to the meeting and carried.

The Chairman asked permission to add the item of the 'Coorg contribution to the Scientific Department of the U.P.A.S.I.' to the agenda, and explained that a sum of Rs. 4,700 as contribution for the years 1924-25 and 1925-26 had been received from the Coorg Administration.

Mr. Murphy asked how this compared with the cess of two annas per acre being paid by the Mysore Planters.

The Chairman replied that the amount received from the Coorg Administration was in addition to the two anna cess being contributed by planters in Coorg.

Mr. Lake said that this amount should be earmarked for expenditure connected with Scientific aid to Coffee interests and proposed a resolution seconded by Mr. J. B. Reid as follows :—

'That the Secretary be instructed to write to the Commissioner of
'Coorg thanking him for the liberal contribution made by the
'Coorg Administration to the funds of the Scientific Department.'

Carried.

The Chairman. The next subject on the Agenda is the Currency Notes (Refund) Rules and to make the matter clear I will read from the Secretary's Report,—'Government propose to amend the rules so that after April, 1927, no claim on half mismatched Notes of Rs. 5 and Rs. 10 shall be admitted. On half notes of Rs. 50 and upwards half value will be paid fourteen days after presentation, provided the counterpart has not in the meantime been presented with a claim for full value. Claims for full value to be dealt with in the same way as claims on lost or wholly destroyed notes and payment made only after five or six years. The result will be that it will be easier than at present to obtain half value of a note which has been cut and more difficult to obtain full value on a half note. The matter was referred to all District Associations and it is pointed out that it is not only while in transit by post that there is risk of loss, but more particularly between delivery by the post office and arrival on estates situated at long distances from the nearest post office. He asked the Secretary what replies had been received.

The Secretary. The Anamalais, Mundakayam, Kanen Devans and South Travancore have no objection to raise to the proposals made by Government. Central Travancore, Nilgiri-Wynaad, Shevaroy's, Coorg and West Coast Associations are opposed to the change, and no replies have been received from the Nilgiri, Mysore and Wynaad Associations.

Mr. Lake said that he was not clear what the difference was between the present procedure and that proposed, and asked that it should be made clear.

Mr. Murphy said that it was not proposed to make the cutting of notes illegal, and he did not think it was worth while taking any steps to oppose the Government proposals.

The Secretary said that the chief difference in the systems seemed to be that in future no claim could be made on loss of half notes of denomination of Rs. 10 and under, and presumably the greater part of remittances made to estates was in small notes. Under present circumstances he

understood that claims on half notes of higher value than Rs. 10 were paid within twelve, or at most 24, months, whereas under the proposals now made they would not be settled for at least five years.

Mr. Lake proposed and *Mr. J. Aird* seconded :—

‘ That the Association protest against the proposal of Government
‘ to amend the Currency Notes (Refund) Rules and request that
‘ they may be allowed to remain as at present.’

Carried.

The Chairman. The next item is ‘Cochin Port Trust.’ All District Associations have agreed to delegate their power of election in regard to the Association’s Trustee on the Cochin Port Trust to the active members of the Executive Committee, the Mundakayam Association however stipulating that the Trustee shall always be a planter.

Mr. Conner suggested as Trustee the names of Mr. Walmsley or Mr. C. E. M. Browne.

Mr. A. P. D. Lodge proposed that Mr. L. A. Lampard be asked to accept the appointment.

The Chairman pointed out that meetings might be held two or three times a month and it is laid down that if a Trustee was absent for three consecutive meetings he lost his seat, so that it seemed impracticable to appoint anyone who was not resident in Cochin. He proposed from the Chair :—

‘ That that Trustee of the Cochin Port Trust representing the United
‘ Planters’ Association of Southern India shall always if possible
‘ be a planter and shall be elected by the postal vote of the active
‘ members of the Executive Committee.’

Carried.

The Chairman. The final Rules of the U. P. A. S. I. European Employees’ Provident Fund have just been received, and as all Rules are made by the General Committee of the Association it is necessary for them to receive your confirmation.

Mr. Cotton. I presume that in Rule 9, page 2 ‘Leave of absence’ means out of India?

The Chairman. Yes certainly and we will add that to the Rule to make it quite clear.

Mr. Wallace asked if Rule 29 which laid down that no attachment order of a Court was enforceable against the funds of the Provident Fund was legal.

The Secretary. That Rule was included under the advice of the Solicitors of the Association.

Mr. Wallace pointed out that the Rules were lengthy, they had not been circulated and required careful consideration before members would be in a position to confirm them and proposed,

‘ That the matter of the Rules of the European Employees’
‘ Provident Fund be postponed till the next meeting of the General
‘ Committee.’

Seconded by Mr. Reed and carried.

The Chairman asked if any delegate had anything to say on the matter of Labour Laws. Government had set up a special committee to consider the amendment of Act I of 1903 and he asked those

representatives of District Association who had been appointed to collaborate with the planting members of the special committee to meet after this meeting and fix upon a time to discuss the matter.

The Chairman. The next item on the Agenda is the amendment of the U. P. A. S. I. Labour Rules. Owing to the establishment of Control Committees of the Labour Department certain alterations are necessary in the U. P. A. S. I. Labour Rules to bring them into accord with the new Labour Department Rules. The Executive Committee at a meeting held in November last approved the following amendments :—

‘ (1) That Rule II be rescinded entirely.

(2) That Rule III be altered to read as follows :—

All complaints as to any breach of these Labour Rules shall be made through the Director of the Labour Department to the Control Committee of the Labour Department Division concerned which shall settle the dispute. An appeal from the decision of a Control Committee may be made to the Executive Committee of the U.P.A.S.I. which shall appoint any three members, not resident in the District concerned and whose decision shall be final. Complaints in connection with Labour Districts not included in any Labour Division area shall be made through the Director of the Labour Department to the Executive Committee direct.’

The Chairman. As no one appears to have any remarks to offer I will propose from the Chair,—

‘ That the amendments proposed by the Executive Committee of the U.P.A.S.I. Labour Rules be confirmed and the numbering of the Rules be altered where necessary.’

Carried.

The Chairman. The next item on the Agenda is ‘The U.P.A.S.I. Indian Employees’ Provident Fund’ and I will ask Major Brock to explain the position.

Mr. Wallace. Before we commence to discuss this I would point out that the resolution carried at the last annual Meeting was,—

‘ That the formation of an Indian Employees’ Provident Fund be postponed until the combined Control Committee can give its opinion on the scheme to the Association.’

As the combined Control Committee do not meet until to-morrow and we have not its opinion before us there seems no purpose in discussing the matter now.

The Chairman. I think you will all agree with that, and therefore I delete the item from the Agenda. The next item is with reference to the payment of passages for wives of employees and I will ask Major Brock to speak to it.

Mr. Murphy. This seems to me a matter for the decision of the Control Committees who have to find the money for the working of the Labour Department.

Maj. Brock. The European Staff are employees of the Association and appointed by it and not by Control Committees. It will not be necessary to increase the cess as the Labour Department Budget is framed with an allowance for additional expenditure.

The following are the answers received from District Associations. The ‘Nilgiris’ write their Association is not interested in the matter and it is not therefore in favour of granting passages. The ‘Kanden Devans’ are in

favour of passage money for wives being paid on the recommendation of the Control Committee concerned. 'South Travancore' is in favour of passage money of wives being paid from U.P.A.S.I. General Funds. 'Coorg' considers there is no necessity to grant such passages. 'Wynaad' suggest the matter be postponed till the end of the current year. 'Central Travancore' is in favour of the proposal. The 'Anamalais' considers the concession should be given to all U.P.A.S.I. employees. 'Mundakayam' is in favour provided that cost is met from Labour Department subscriptions. 'Mysore' is not in favour. The 'Nilgiri-Wynaad' advises that it will give its opinion at the next General Control Committee Meeting. The 'West Coast' is opposed to granting the concession until owners and Directors of the majority of estates comprising that Association express their approval by granting passages to the wives of managers and assistants. The 'Shevaroy's' is not in favour of granting passages to wives. Of the 86,000 acres of tea subscribing to the Association, the Directors of 71,375 already make this concession to wives of their employees.

Mr. Murphy said the point he wished to make was that if of the Rs. 80,000 allotted to the Labour Department by the U.P.A.S.I. Rs. 5,000 was earmarked for passages, extra money must be raised by the Control Committees to make up for what otherwise would have been available from the U.P.A.S.I. grant. The money must come from somewhere and he thought it meant extra subscriptions.

Maj. Brock said that if this concession of wives' passages was passed it would not mean on the average more than Rs. 1,500 per annum to the Labour Department.

Mr. Aird said that the feeling among members of his Association was that pending the revision of salaries which was now under consideration the subject of payment of wives' passages should be left over.

Maj. Brock read the resolution passed at the Annual General Meeting which was,—'That the question of free passages to the wives of European Employees of the Labour Department be referred back to local Associations for consideration.' This at the request of the Secretary he had done shortly after the Annual Meeting and they had expressed their opinions.

Mr. Aird. Pending decision on the question of salaries this matter must be held over.

The Chairman asked if any member had a resolution to bring forward, from what *Maj. Brock* had told them the general opinion seemed to be in favour of making the concession. Regarding *Mr. Aird's* argument it would be easy for those considering the revision of salaries to take into consideration this concession if agreed to.

Mr. Behr proposed and *Mr. Wallace* seconded the following resolution:—

'This Association is in favour of return passages being granted to the wives of European employees of the U.P.A.S.I. not more frequently than once in five years.'

Carried.

The Chairman pointed out that no limit as to cost of passage or the shipping Line by which they were to be taken was mentioned in the resolution.

Maj. Brock said that this covered by the Labour Department Leave and Furlough Rule No. 3.

With a vote of thanks to the Chair the proceedings terminated.

H. WADDINGTON,
Secretary,

U.P.A.S.I. SPORTS CLUB

Planters' Week Results

TENNIS

A. INTER DISTRICT.—

Mundakayam Cent. Travancore	}	Mundakayam 3 pts. to nil. Wynaad	}	Mundakayam 3 pts. to 1	}	Mundakayam 3 pts. to nil	}	
		West Coast Nil.-Wynaad	}	Nil.-Wynaad W. O.	}		}	Mundakayam 3 pts. to 1
		U.P.A.S.I. Anamalais	}	Anamalais 3 pts. to nil	}	Anamalais 3 pts. to 1	}	
		Nilgiris Kanan Devans	}	Kanan Devans 3 pts. to nil	}		}	

B. VETERANS CUP.—

		Cotton + 15 Ward + 15	}	Ward 6.2, 6.1	}	
Barber + 15 Pinches - 15	}	Pinches 6.4, 9.7 Behr + 15	}	Pinches 6.8, 3.6, 6.4	}	Pinches 6.4, 3.5, 6.3

C. HARPER CUP.—

		Lodge Swayne	}	Lodge 6.4, 6.3	}	Lodge 6.2, 2.6, 6.4	}	
		Downing Bayzand	}	Bayzand 5.7, 6.1, 6.2	}		}	
		Collet Davies	}	Collet 6.2, 6.1	}		}	Collet 6.3, 6.3
Gibbon Browne	}	Flanagan Gibbon W. O.	}	Flanagan W. O.	}	Collet 6.4, 7.5	}	
McPherson Hawkins	}	McPherson W. O.	}	Danagher W. O.	}		}	Collet 7.5, 6.2
Danagher Geddes	}	Danagher 6.3, 6.4	}		}	Pinches W. O.	}	
		Scott Pinches	}	Pinches 6.1, 6.4	}		}	Conner 6.1, 6.0
		Egan Wyer Inman	}	Inman W. O.	}	Conner 6.2, 6.3	}	
		Conner Farley	}	Conner W. O.	}		}	

TENNIS—(Continued)

D. MURPHY CUP.—

Mrs. Holden	Miss Horrocks				
Miss Horrocks	6.0, 6.1				
Miss E. Wright	Mrs. Butler	Mrs. Butler			
Mrs. Butler	W. O.	6.4, 6.3			
Mrs. Waddington	Mrs. Waddington		Miss Barber		
Mrs. Lodge	4.6, 6.3, 7.5		6.4, 7.5		
Miss Barber	Miss Barber	Miss Barber			
Mrs. Conner	6.4, 6.4	6.3, 6.3			
Mrs. Wallace	Mrs. McDougall				
Mrs. McDougall	W. O.	Mrs. McDougall			
Mrs. Scott	Miss Grandage	6.3, 6.1			
Miss Grandage	W. O.		Miss Downing		
Mrs. Oakes	Mrs. Oakes		6.4, 6.3		
Miss Comins	6.4, 6.2	Miss Downing			
Mrs. Davies	Miss Downing	6.1, 3.6, 6.4			
Miss Downing	7.9, 6.2, 6.1				
					Miss Barber 6.1, 6.3

GOLF

A. INTER DISTRICT—

Anamalais	U. P. A. S. I	Kanan Devans	
Kanan Devans	Kanan Devans	9 and 8	
	7 and 6		Kanan Devans 2 and 1
Nilgiris	Nilgiris	Nilgiris	
West Coast	W. O.	1 up	
	Nil.-Wynaad		

B. PINCHES CUP—

	McDougall	McDougall			
	Collet	W. O.	Backhouse		
			3 and 2		
	Bruce	Backhouse			
	Backhouse	W. O.			
	Fulcher	Fulcher			
	Wallace	W. O.			
	Laird	Laird	Laird		
		W. O.	W. O.		
Nicolls	both				
Jack	Scratched				
Colthurst	Colthurst	Colthurst			
Cooper	W. O.	W. O.	Colthurst		
	Will		8 and 7		
	Downing	Downing			
	Browne	W. O.			
	Holden	Holden			
	Bulteel	2 and 1			
	Brock	Newman	Holden		
	Newman	W. O.	W. O.		
					Colthurst 5 and 4
					Colthurst 3 and 1

GOLF—(Continued.)

C. WINDLE CUP—

Mrs. McDougall	}	Miss Barber	}	
Miss Barber	}	W. O.	}	Miss Barber
				7 and 5
Mrs. Waddington	}	Mrs. Waddington	}	
Miss Grandage	}	3 and 2	}	

RUGGER

CARVER CUP—

Anamalais	}	Anamalais	}	Anamalais
Combined Wynaads	}	30 pts. to nil	}	16 pts. to nil
		Kanen Devans		

The U.P.A.S.I. Team beat the Royal Ulster Rifles by 2 tries (6 pts.) both scored by Mayow to 1 try (3 pts.) scored by Lieut. Cole.

CRICKET

The U. P. A. S. I. Team beat Wellington Gymkhana by six wickets and 67 runs.

The U. P. A. S. I. Team drew with the M. C. C.; scoring 219 runs for nine wickets against the M. C. C.'s 284 for nine in the first innings; and 46 for two wickets against their 99 for four in the second.

The LANGLEY Bat was won by Cowdrey who made 101 against the M. C. C.

The U. P. A. S. I. team lost to Ooty United by six wickets and 1 run.

FANCY DRESS

A. ADULTS.	(Ladies)	1st Mrs. Lodge	2nd Miss John
		as 'Wooden Soldier'.	as 'Raga-Muffin'.
	(Gentlemen)	1st Dandison.	2nd ?
		as Labour Department 'Rules'.	as 'Glaxo'.
B. CHILDREN	(Planters)	Pamela Colthurst	as 'Night' and Peter Vincent as 'The Complete Golfer'.
	(Guests)	Majorie Thomson	as 'Orangeade' and Rae Steele as 'Peter Teazle'.

U. P. A. S. C. BADGE

The prize for the best design was won by Miss Weld Downing.

(We hope next week to supplement the above statement of the bare results of the various Planters' Week events by a list of the personnel of the various Inter District and U. P. A. S. C. Teams and by details of the Cricket Scores. *Ed.*)

MALARIA

BY

SIR RONALD ROSS

(Being the substance of an Address to the Sabaragamuwa (Ceylon) Planters' Association on January 30, 1926.)

(Continued from Page 139, issue of February 27, 1926.)

VARIOUS SPECIES

Sir Ronald then described the various types of mosquitoes: the anopheles, the malaria-breeder; the stegomyia, the carrier of yellow fever; the culexfacies, a mean-looking creature; the Rossii, named after the speaker; and like himself, perfectly innocent. The conditions which cause the breeding of mosquitoes differed not only from plantation to plantation but from a fifty to a hundred yards off. In Mauritius in one place the Indians were living near a marsh. A hundred per cent spleen rate was found among them. But about a hundred yards away there lived people who did not get malaria. These people were screened round by the people living near the marsh, because the mosquitoes were not going a hundred yards to get their dinner when they could get it close at hand. Another thing to be remembered was that mosquitoes found food in bananas, from birds and from cattle. In the east of England at the end of the war this fact was proved. A large number of soldiers from Salonica were brought and mosquitoes which used to be found where the cattle and horses were tethered, left the horses and attacked the men, and immediately there was an outbreak of malaria in the east of England. To understand the story of malaria and the study of mosquitoes was a very complex thing.

WHAT PLANTERS OUGHT TO DO

'What had the planters better do in the circumstances?' said Sir Ronald, and answering his question, said that he had come out to Ceylon largely owing to Mr. Shakespeare, who was much interested in the question, as also was Mr. Garrick. Ceylon had given a considerable sum of money for the Ross Institute, which was being started in London. He had retired and was living very comfortably when he was dug out of his seclusion, and was made Director of the Institute. At the Institute they were making continuous studies in malaria and other tropical diseases. It was intended only for research work and not for teaching. He came out to Ceylon to revive himself in the presence of the sun and recover from the darkness and horrible effects of that villainous city called London. (Laughter.) The point he wished to emphasize was what steps the planters were going to take to get rid of malaria. A very good State organization was in existence. They could not get a better P.C.M.O. than Dr. Bridgar, a man of great enthusiasm, no better man could they get as Malariologist than Mr. Carter. They could not get a better Governor than Sir Hugh Clifford. (Applause.) He had known Sir High Clifford for quite a long time and that he had had done a great deal of anti-malarial work. Lady Clifford was heard to say that it was pity that mosquitoes were allowed to breed in house compounds. The point was that the work was being done. Mosquitoes were being kept out of the neighbourhood of bungalows. He had been to three hotels and in four or five planters' bungalows, but he had been bitten only once. He saw blood in the mosquito, but it might have been some-body else's. He remembered when living in India twenty-two years ago, he could not step

into a bungalow and remain long without being bitten by a stegomyn, but it was not so in Ceylon. He must, however, say that in India they got a better mosquito net than one got in Ceylon. Perhaps the Ceylon mosquito net was based upon the probability of there being no mosquitoes. (Laughter.) In the old days mosquitoes abounded. Now there has been a kind of silent revolution. Bungalows in Ceylon were happily free when compared with planters' bungalows in the Darjeeling terai. A large number of planters, Major Oldfield, Mr. Slater, Mr. Villiers and others were very much interested in the problem.

(To be concluded next week.)

LETTER TO THE EDITOR

(The 'Planters' Chronicle' is not responsible for the opinion of its correspondents.)

Toll Gates

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

I am glad to see from your article in your issue of the 20th instant that you have taken up the subject of Toll Gates. In raising the same, I think Messrs. Peirce, Leslie & Co., are doing a great service to all motor owners; and as most Planters are owners of cars, and many also of lorries, the Toll Gate nuisance is quite a legitimate one for the Association to fight. The whole system of collecting money for upkeep of roads by this means requires thoroughly debating, and either reforming or preferably scrapping altogether. In any case it is quite time we refused to pay any toll demanded by anyone who likes to try to stop a car on the highway, either by barring the road with a bamboo, shouting, or waving a flag. If we are to have toll gates, they should be adequately labelled as such, and a full tariff of fees exhibited where all may read them.

With reference to Messrs. Peirce, Leslie's letter to the President of the District Board of Calicut, I do not know what weight a 1 ton lorry actually carries, but a bullockbandy often carries over a ton (=approx. 23 bags, each containing 3 bushels parchment coffee), and in addition there is the weight of the cart and the bulls,—probably not much less than a Ford lorry.

KELAGUR ESTATE,
JAVALI P.O.,
February 23, 1926.

Yours, etc.,
E. L. POYSER.

(We notice that the Taxation Enquiry Committee report, published on the 26th ultimo, suggests that, so far as motor vehicles are concerned, Tolls should be abolished and replaced by a provincial tax which would be expended exclusively on the maintenance of the roads. The Finance Member in his Budget Speech last Monday stated that time had not permitted the Government to consider the adoption this year of any of the valuable modifications in the taxation system which the Committee proposed; but that its proposals would give all the Governments in India ample material for reflection in the course of the coming year. It would appear therefore that the Toll Tax inter alia will, before long, be automatically brought under discussion; and those opposed to it will doubtless find in the occasion a unique opportunity for expressing their views. ED.)

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending February 27th, 1926

Bank Selling Demand Draft on London

22nd	23rd	24th	25th	26th	27th
18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.

II. Summary of latest Market Reports and Prices to hand:—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending February 6, 1926	January 1 to February 6, 1926	January 1 to February 6, 1925
A. TEA (WEEK ENDING FEBRUARY 6, 1926)				s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 9·08	1 8·86	1 8·38
Thayamudi ...	343	1 11	S. India	**1 9·50	††1 9·46	††1 8·15
Thonimudi ...	242	1 11	Ceylon...	1 9·89	1 10·14	1 9·42
Pachaimallai ...	102	1 10½	Java ...	1 5·31	1 5·25	1 3·73
High Forest ...	92	1 10¼	Sumatra.	Nil	1 6·73	1 7·80
			Nyassa-land.	Nil	1 6·20	1 4·77
(b) Central Travancore			Total ...	*1 9·07	†1 9·10	†1 8·27
Fairfield ...	100	1 9¾				
Stagbrook ...	92	1 9				
Twyford and Ashley.	130	1 8¾				
Glenmary ...	98	1 8¾				
(c) Kanen Devans—						
Chundavurrai ...	159	2 0¾				
Yellapatti ...	69	2 0¾				
Periavurrai ...	123	2 0½				
Munnar ...	250	1 10¼				
(d) Mundakayam—						
Yendayar ...	125	1 7½				
(e) Nilgiris—						
Nonsuch ...	116	2 2	(a) Coorg—			
Prospect ...	272	2 1¼	Cotta Betta ...	25 134 0	No. 2 only	
Ibex Lodge ...	51	1 11½	Margoli ...	17 155 0	P. B. only	
Bhawani ...	111	1 11	(b) Mysore—			
(f) Nilgiri-Wynaad—			Olivers ...	23 155 0	No. 1 & P.B.	
New Hope ...	217	1 7¼	(c) Shevaroy—			
Woodbriar ...	66	1 7¾	Moganaad ...	72 142 2	All grades	
(g) South Travancore—						
Invercauld ...	46	1 8				
Merchiston ...	87	1 7¾				
(h) Wynaad—						
Erramaculla ...	180	1 7½				
Elstone ...	120	1 7				

(b) COFFEE

SPECIAL CABLE, LONDON, MARCH 3, 1926

'A' QUALITY 144s. MARKET QUIET

London Prices (week ending February 9, 1926)

	Bags.	s. d.	Quality
(a) Coorg—			
Cotta Betta ...	25	134 0	No. 2 only
Margoli ...	17	155 0	P. B. only
(b) Mysore—			
Olivers ...	23	155 0	No. 1 & P.B.
(c) Shevaroy—			
Moganaad ...	72	142 2	All grades

(c) RUBBER

The London quotation for Plantation first Latex Crepe on Monday, March 1, 1926, was 27d.

** Based on 6,637 packages.

†† " " 27,639 "

†† " " 20,159 "

* Based on 82,847 packages.

† " " 406,612 "

† " " 329,799 "

(d) *Précis of reports on the London Market received on Monday, March 1, and covering the seven days ending Tuesday, February 9 :—*

(1) *Tea.*—The prices were slightly easier during the first four days under review ; but it will be noticed from a comparison of the averages published on the previous page with those which appeared a week ago that the decline was uniformly small—being most marked at 0·31*d.* in the case of Ceylon and least at 0·05*d.* in the case of South Indians. This downward tendency however was completely reversed on Monday, February 8, when bidding was most animated ; and prices all round showed an advance, which was most marked in connection with the common and low medium sorts.

The I. T. A. estimate the Northern Indian crop to the end of December 1925 at 312 $\frac{3}{4}$ million pounds as against 327 $\frac{3}{4}$ million pounds and 327 million pounds respectively for 1924 and 1923.

(2) *Rubber.*—Rubber again was easier ; Spot Plantation First Latex Crepe being 32 $\frac{1}{2}$ *d.* on Tuesday, February 9. Stocks underwent a slight decline of 388 tons to 9,549 tons. This of course, though a very rapid increase on the 3,800 tons stock at the end of November, is by no means large enough (when compared with the annual production of over 600,000 tons) to enable operators to take too many liberties with the price. The suddenness of the increase is probably to be attributed, not so much to concerted action on the part of American Buyers, as to increased shipments from the East consequent upon the seasonal lack of finance and holding capacity in Singapore.

(3) *Coffee.*—During the period under review the market generally was easier owing to the practical cessation of export demand ; and fine Kenyas were practically the only kind which held their own. The market has decided to have three selling days per week instead of two. The new East Indian Crop did not arouse much attention, and sellers withdrew the majority of their lots.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, February 27, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	...	93·67	93·67	19. Coonoor ...	...	92·31	92·31
2. *Tenmalai.	...	103·25	103·25	20. Kotagiri ...	...	71·55	71·55
3. Mundakayam.	...	156·84	156·84	21. Ootacamund	...	53·19	53·19
4. *Peermade.	...	173·67	173·67	22. Yercaud ...	...	55·55	55·55
5. Twyford	202·44	202·44	23. Devala ...	...	132·24	132·24
6. V'periyar	81·67	81·67	24. Gudalur ...	...	74·65	74·65
7. Kalaar	212·34	212·34	25. CALICUT ...	...	134·54	134·54
8. Chittuvurrai	...	64·05	64·05	26. Kuttiyadi ...	...	179·44	179·44
9. BODI'KANUR	...	28·27	28·27	27. Vayittiri ...	...	160·31	160·31
10. COCHIN	110·85	110·85	28. Manantoddi.	...	110·87	110·87
11. *Mooply	116·21	116·21	29. Billigiris ...	...	69·19	69·19
12. Mooply Valley	...	125·89	125·89	30. *Sidapur ...	...	74·44	74·44
13. Pachaimalai	...	124·05	124·05	31. Pollibetta ...	...	85·66	85·66
14. Mudis	202·53	202·53	32. Somwarpett	...	86·14	86·14
15. POLLACHIE.	...	30·18	30·18	33. Ballupete ...	...	76·24	76·24
16. Manjeri	126·58	126·58	34. MANGALORE.	...	139·40	139·40
17. Nilambur	101·26	101·26	35. MADRAS ...	...	63·35	63·35
18. Naduvattam	...	84·32	84·32				

W = During the week.

P = Previously.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. II] SAT., MARCH 13, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	169	U. P. A. S. I. Sports Club—	
The Romance of Tea ...	171	‘ Planters’ Week ’ Teams ...	179
Malaria by Sir Ronald Ross ...	172	The Longevity of Hevea	
District Association Meetings—		Brsiliensis ...	181
South Travancore ...	176	Commercial and Meteorolo-	
Monthly Report of the G. S. O.	177	gical ...	183

EDITORIAL NOTES

The Benevolent Fund As we go to Press we learn that the English and Scottish Co-operative Wholesale Society, Ltd. has, through Sir Fairless Barber, sent a very handsome donation of Rs. 1,000 to the U.P.A.S.I. Benevolent Fund.

What's in a Name One of the most inspiring stands ever made by a band of patriots against foreign aggressors was made twenty-four centuries ago at Marathon. To gaze on it will always fire the imagination, and may even (as with Byron) lead to an outburst of verse.

‘ The mountains look on Marathon
And Marathon upon the sea
And musing there a little while
I dreamt that Greece might still be free.’

Even more inspiring must it be to live year in and year out amongst people who have, as it were, out-Mohameted Mohamet; and determined that, if they could not go to the mountain—or in this case the plains—they would in name at any rate bring the plains to themselves. So we are not surprised to learn that the dwellers in the little remote township of Marathon in the South West of Texas U.S. A. have been consumed with an ardent desire to help their country to throw off the yoke of its oppressors from the tropical rubber-producing countries, who are draining it of some of the gold which it apparently looks on as its very life blood. Their ardour, we understand, has materialized in the form of a factory which takes in bundles of the local wild Guayule Shrub; and turns out 30" × 15" × 3" sheets of rubber at the rate of a ton a day.

Quid pro nihilo We have all heard of the optimist who proposed to make a lucrative living out of a concern which would cost nothing at all to keep up. His plan, if our memory serves, was to keep both cats and mice; and to feed the former on the latter and the latter on the remains of the former after they had been deprived of their marketable skins. A somewhat similar self-supporting cyclical arrangement is proposed by a medico of Texas who suggests that bats might be fed on the

mosquitoes which infest malarial districts and that the guano collected from the bat roosts would provide the adjacent estates with manure!

We have just received the 'Season and Crop Report of the Madras Presidency for the Agricultural Year 1924-25.' This period is on the cover equated with 'Fasli 1334' which, we believe, ended on June 30, 1925; and, if this is so, the Report has been made available to the public just within nine months of the close of the period which it reviews, and, judging by Government standards, must, we suppose, be considered commendably up-to-date. The compilation—which contains 36 pages of informative tabular and diagrammatic statistics in addition to 16 pages of text—seems primarily intended for, and indeed appears admirably to meet, the needs of those desirous of obtaining a comprehensive survey of the present state of the indigenous crops in the Madras Presidency; and as such it is perhaps but natural that Coffee, Rubber and Tea should be treated as 'also rans'. One (Page 9) of the two obiter references which we have been able to trace to these products states that Coffee and Tea have been included under 'Other products and narcotics' in a certain statement in the Appendix which show the acreages under particular crops. The other reference (Page 14) states that the exports increased under Tea; but proceeds some 28 lines lower down to say that there was a slight decline in the exports of Tea. It is almost as though alternative forecasts were drafted to facilitate early publication; and that, through some inadvertence, the one which eventually proved inapplicable was never struck out of the report!

At the Sri Mulam Assembly the week before last Mr. E. T. C. Farr is reported to have made vigorous representations regarding the extremely unsatisfactory condition of certain portions of the Punalur-Vadaserikara Road. He showed that the road had been practically impassable at at least one point during the last monsoon; and that much work remained to be done if it was to be kept open and available for transport during the coming rainy months. Mr. Farr also dwelt on the dangers and inconveniences of insufficiently wide bridges, and of the practice of allowing veritable quagmires of soft mud scooped up from the side drains to accumulate in the centre of the road.

The Chief Secretary to the Government of Madras notifies under date Fort St. George, February 23, 1926, that His Excellency the Governor-in-Council has been pleased to direct that Section 2 of the Madras Coffee Stealing Prevention Act (VIII of 1878) shall be in force in the Kollegal and Gopichettipalaiyam Taluqs of the Coimbatore District on and after March 15, 1926.

The Seventy-Second Annual Report of the Planters' Association of Ceylon states that in March, 1925, the tender foliage of the rubber trees was considerably damaged by a species of *Oidium*, or leaf mildew, attributable to the abnormal rains and cold winds which were experienced at a time which normally is one of drought. Leaf and Pod *Phytophthora* proved amenable to spraying; Bark Rot was successfully treated by Fungicides; and Root diseases were kept satisfactorily under control, with the exception of *Sphaerostilbe Repens* which proved extremely difficult to check. Vigna, the report states, seems likely to save many trees from *Ustilina* and *Diplodia* in the future by preventing the development of 'sun cracks' in exposed lateral roots.

THE ROMANCE OF TEA

Prompted by the perusal of a Quaker Circular of 1835 which shows that the then Liverpool price of tea ranged from ' Good common Bohea ' at 3s./- and ' Good Caper ' at 4s./- to ' Souchong ' at 6s. 4d., ' Flowery Pekoe ' at 7s./- and ' Good Hyson ' at 8s. 6d. ; *The Times* in a recent leading article laments the fact that the more romantic commercial enterprises seem unable to produce their own literateurs. It particularizes the Tea Industry : where it suggests an unsuspected wealth of romance is enshrined. It points out that the very names of the various grades seem to talk of the gay, indomitable, adventurous, care-less spirit which must have animated those who first brought tea to our shores and have continued to inspire their pioneer successors who despite extraordinary hostility persevered until they had laid the foundations of the industry as it exists to-day.

Extraordinary and inveterate that hostility certainly was. Jonas Hanway, the inventor of the umbrella, (can she have had ulterior motives, and feared that tea-drinking would keep people indoors ?), felt as strongly on the subject as did subsequently Dame Dorothy Bradshaigh, who when endowing a Lancashire almshouse in 1775 stipulated that one of the rules governing the bequest should forbid the use of ' any foreign tea, commonly called by the name of Bohea and Green. . . . Those who can afford to indulge themselves in an article so unnecessary, so expensive, so destructive of both time and health (the tea such people must drink being poison), I shall not allow to be proper objects of this Charity ' ; or later still William Cobbett, who asked ' Can any good labourer look back upon the past thirty years of his life without cursing the day on which tea was first introduced into England ? ', and declared that tea was ' an enfeebler of the frame, an engenderer of effeminacy and laziness, a debaucherer of youth, and a maker of misery for old age '.

The romance of tea in association with our Island Story is not of course delimited by these reminiscences in *The Times*. It could well be taken back to the Boston Episode of the 340 chests in 1773 or even to Pepys's reference to his draught of tea on September 25, 1660 : it could equally well be carried forward to such dark days as those of 1904 when tea was fetching on an average about 6d. per pound or something like one four-hundredth of the price which Pepys and his contemporaries had to pay.

Moreover it is ready and willing at our bidding to carry us still further afield. It transported Leigh Hunt through the whole history of the Chinese and collaterally of their conquerors from Tartary and of their neighbours from Japan, over the routes of Marco Polo and the itineraries of the Jesuit Missionaries, and in the wake of the Dutch Vessel which first brought tea to Europe in 1610 ; before it brought him Home again to Pope's *Belinda*, Goldsmith's *Citizen of the World*, and great Johnson, the Prince of Tea Drinkers, who poured out extemporaneous satirical parodies of the ballad while Mrs. Hetty Thrale poured out his tea.

' And how I pray thee, Hetty dear,
That thou wilt give to me
With cream and sugar softened well
Another cup of tea.

But hear alas this mournful truth,
Nor hear it with a frown,
Thou canst not make the tea so fast
As I can drink it down.'

Finally it is no respecter of persons. It vouchsafes its visions to the humble as well as to the Leigh Hunts. Indeed it is more bountiful to the former ; for to the homely folk who in faith consult the tea leaves at the bottom of their cup it unfolds not only what has been but what is still to be.

Such romance, contends *The Times*, was not in all its niceties adequately exploited even by such literary giants as Samuel Johnson or Sydney Smith, who knew not the difference between strong Souchongs, flowery Pekoes, and wiry Cangous, but regarded them all alike as turgid synonyms for tea. To make matters worse; their mantle—deficient as it necessarily was—does not seem to have fallen upon any present day scribe; so that we still perforce look to the writings of bygone stalwarts for the praises of tea; and in doing so possibly make their Shades writhe in unutterable boredom as they 'listen in' to *ad nauseam* reiterations of their over trite bons mots.

MALARIA

BY

SIR RONALD ROSS

(Being the substance of an Address to the Sabaragamuwa (Ceylon) Planters' Association on January 30, 1926.)

(Continued from Page 166, issue of March 6, 1926.)

A MALARIOLOGIST FOR THE PLANTERS

They ought to have a malariologist for the planters, to go round, study, the plantations and check any possible outbreaks of malaria. It could only be done by experts. It was for all planters to unite and work for the common good. 'Leave it not for the malarial estates only, if you did you will further cripple the malarial estates. Do it in the usual British method, always help the person who is suffering to overcome his difficulties. Employ a man in common. It may be that you have no malaria at the moment. You may have a malaria outbreak to-morrow or next year, any time. You ought to have a claim on your malariologist to help you. I remember there was a terrible outbreak of malaria in the Punjab in 1908. The death rate in India was 1,300,000 per annum through malaria, among a population of 300,000,000. That was an enormous figure. Perhaps you may not have to face such a serious proposition. However, you had better club together to have your malariologist to do this in a scientific manner. You may ultimately have to employ two men. Well, it does not matter. Always remember disease costs you money, if you want to prevent that disease then you have got to spend money. You've got to choose between the one and the other. If you prevent malaria, you got to spend. I hope the cost of prevention will be very much less than the cost of curing the disease. Mr. Chairman, ladies and gentlemen, I have talked to you on general principles and it is only a tenth part of all that may be said on the subject. I should like to hear any difficulties which you require explained. I shall be happy to do so.' (Loud applause.)

MALARIA PARASITE'S AGE

The first question was asked by a member who wished to know how long the malaria parasite lived.

Sir Ronald replied that the individual parasite lived a very little time. It was constantly growing and reproducing itself over and over again for years. There was a case in Paris of an old woman who got infected when she was a child fifty years before when living in the tropics. His father who had been in India, got malaria after a lapse of fourteen years.

QUININE TREATMENT

Asked whether quinine treatment should be continued for two months, his advice was three months, and he insisted on it.

'Were they right in inferring that a malarial subject treating himself with quinine for three months continuously had a fair chance of getting rid of malaria?' asked a member, to which the reply was: 'I think it is a very great certainty.'

'During the course of this treatment do these germs breed other germs?' asked another member.

'We calculated the result of a large number of cases treated during the war. The average from that is that about 20 per cent are killed after each dose. That seems a large amount. You start with a hundred million parasites. Take away twenty per cent there is still eight million left,' replied Sir Ronald, adding: 'Your quinine kills only one out of five parasites and you get parasites hiding themselves in secure places, in the brain sometimes, where there is not much activity going on in some people and they escape.' (Laughter.)

MOSQUITOES IN RUBBER PLANTATIONS

'How do mosquitoes breed in rubber plantations?'

'I don't think they breed there at all. I don't think so, because I have been in several rubber plantations and I have not seen any mosquitoes yet.'

When it was stated that in thick rubber plantations where one found a lot of fallen leaves, the slightest disturbance showed the presence of mosquitoes, Sir Ronald said that they might be the *stegomyia* that breed in those places. It was a question for the Malariologist. 'The question of rubber trees. I fancy, you get a few trees with holes in them, in the place where the branches fork and they are called rot-holes caused by water,' he added. 'You often get mosquitoes in them. A particular species like that sort of place, not the *anopheles*, although a few have been found.'

AN AGE OLD PARASITE

In answer to further questions, Sir Ronald Ross said that each species of animal was ordained by nature to look after itself. The *anopheles* mosquito might occasionally fall a prey to birds of the air, but was not easily caught. The germ carried by the mosquito gave it the stomach-ache, but numbers of infected mosquitoes are known to live for a month in bottles. The parasite did not seem to kill the mosquito. It did not kill man either. It was a very old parasite. Similar parasites probably started millions of years ago.

INFECTION FROM MAN TO MAN

Continuing, Sir Ronald said that the parasite in the mosquito was not only conveyed by the mosquito to man but the same end could be achieved by inoculation from man to man. This had been done on a large scale. General paralysis, a very fatal disease in England, was now being treated by inoculation with live malaria with great success apparently. He was not prepared to pronounce it entirely as a success, but it has been tried by injecting a drop of blood of a malarial patient into the brain of a patient suffering from general paralysis. After a fortnight,—the incubation period—the man began to suffer from malaria. A point of great interest in

such cases was that it was very much more easy to cure the malaria of the artificially inoculated case of general paralysis. The malaria was cured after two or three small doses of quinine. The theory which explained it was that the two germs fought each other and did not generally agree and they annulled each other. That was a novel piece of work that was being carried out now.

CASES OF IMMUNITY

He admitted there were certain people who were immune and not susceptible to malaria. That was because, with every disease there must be some natural difficulty in the parasite succeeding in certain cases. It was the same in cholera too. It killed only a small proportion of the people attacked. A large number of people seemed to be immune naturally. A large number of cases known to him seemed to be free from malaria because they had had it already in their childhood. For instance, the natives of South Africa, as children suffered from large malaria spleens, yet when they grew up, they might be exposed to the worst malaria and yet not get it at all. On the other hand there were three species of malaria parasite, the effects of infection of each differing very much. It was a very complex question.

CHRONIC ENLARGED SPLEEN

In answer to a question as to the most effective treatment for chronic enlarged spleen, Sir Ronald said that the question would lead to a tremendous medical discussion. He would advise, to begin with getting rid of the malaria parasite, first by steady dosing with quinine. Then a course of purgatives might follow, the spleen would remain hard but he did not know whether they would succeed in getting rid of the hard spleen which would remain all their lives in certain cases as dead spleen. They must get rid of the malaria first.

PARASITES AND THEIR HOSTS

It was now known, said Sir Ronald, that certain species of parasites had their particular hosts. The anopheles found a host in the mosquito and man. There was another species carried only in the deer and the tiger, while a third was common to the lion and some animal that the lion eats. These parasites were particular about their hosts. They do not live in all kinds of creatures. They were found almost entirely in the particular species for which they were created to live or which evolution has enabled them to live.

MALARIA AND NEW CLEARINGS

In answer to questions on the subject of malaria in new clearings, Sir Ronald said that in the Federated Malay States tremendous difficulty was encountered when they opened up jungle. It was curious but true that one species of mosquito which lived only in great jungles, directly jungle was cleared, went over to the nearest puddle. It was a question why malaria broke out badly when new land was opened. That depended upon local conditions and the answer must be given by the Malariologist. One reason was that coolies working on a new clearing slept in one big building and led a congregate life. If an infected mosquito bit one man and then another, the whole lot of them in the same shed get infected. Most mosquitoes must have water to breed, but mosquitoes have been known in West Africa to lay their eggs in damp dead leaves, and although a draught might follow, the next shower of rain enabled the eggs to hatch out. The mosquito is known to travel as far as a man could walk. They

lived for a month or two and travelled often a hundred miles but they moved about zig-zag fashion all over the place till they reached a place where they could get food.

MALARIA AND SHOOTING TRIPS

'Asked for advice as to the best means of preventing malarial fever when going out on a shooting trip, the answer was: 'Be very careful in using your mosquito net at night. If it is a very dangerous locality, I would advise you to begin to take quinine. Take about five grains a day, and continue it for some time.'

MALARIA AND TREES

'Why is it that animals have no malaria same as the human being?' asked a member.

The reply was: 'Because every species of parasite has its own species of host. Animals that get true malaria are man, monkeys, bats and birds, all connected with trees. In some extraordinary way, other animals don't get malaria. Malaria parasites have been trained by evolution to live in those particular animals, that are connected with trees. There was a similarity in the blood of man and that of birds and bats. As a matter of fact, it had been found by Dr. Nuttall of Cambridge, who states that there is a relation between the blood of men, bats, monkeys, etc.'

'Have you ever tried to inoculate the blood of an animal that does not get malaria, to prevent malaria?'

Sir Ronald replied: 'It is a dangerous thing to do. It is not worth the trouble. You may get your blood coagulated and you will have to take a lot of whisky and soda to get rid of it,' he concluded, amidst laughter.

Continuing, he said that there was no hard and fast rule as regards outbreaks of epidemics just as there was no such thing in nature as straight lines. They all curved and varied. An epidemic might occur in a great degree one year and be a lesser one another year. It might be due to climatic conditions suitable for the particular disease. There were fourteen different factors connected with malaria alone. He had analysed them mathematically. He advised all those living in malarial districts to take quinine. If they visited the place for a day or two, they must take five grains a day while there, and continue for quite a month afterwards. It may be that the infection is there, but it would take time. Say three weeks for the malaria parasite to develop. Five grains a day before breakfast and continued for a month, was his advice. As regards the correct time of day to take quinine, he said that the malaria germ started breeding between 9 and 11 a.m. That was the time quinine should be taken, because quinine affected only the young parasites that are hatching out every day in the blood. He would advise taking quinine before the first meal for the day, not the *chota hazri*, but before breakfast. A lot of people took quinine at night. That was not effective.

'How do you account for the deafness that follows the excessive taking of quinine?' asked a member, to which Sir Ronald replied that that was a medical question.

'Is the mosquito more active at night or in the morning?'

'It depends on the species. Certain species come into the house at night and go out about 5 a.m. The most dangerous time would be when the anopheles is out. He comes on at night when you are sleeping. You should have a mosquito net to protect you at night.'

SOUTH TRAVANCORE PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of the Fourth Quarterly Meeting of the above Association held at the Quilon Club, Quilon, at 9.30 a. m. on Saturday, February 6, 1926

Present

Messrs. E. Hall (*Chairman*), Chas. Hall, J. R. N. Pryde, R. Branson, A. H. L. White, T. L. Jackson, A. P. D. Lodge, W. Gillespie, F. G. Millar (*Honorary Secretary*).

Visitor

Mr. G. McPherson.

1. The Honorary Secretary read the notice calling the meeting.
2. Minutes of Quarterly Meeting held on November 7, 1925, having been published in the *Planters' Chronicle*, were taken as read and confirmed.
3. *Election of Delegate to Sri Mulam Popular Assembly*.—Mr. E. T. C. Farr having kindly undertaken to represent the Association, his election was confirmed and it was suggested that the subjects to be brought forward by the delegate should be :

(1) Interruptions on the South Indian Railway Line ;

(2) Condition of Government cart road from Koni Village to Cavunal Estate.

4. *Rubber Growers' Association Representation on Local Committee*.—It was proposed by Mr. W. Gillespie and seconded by Mr. T. L. Jackson that Mr. L. A. Lampard's election as South Travancore Planters' Association representative be confirmed. *Carried*.

With regard to the question of control and working of the Rubber Mycological Station brought forward by the West Coast Planters' Association under their resolution dated January 2, 1926, it was decided to leave matters in the hands of Mr. Lampard to enable him to consult with the other members of the R. G. A. Local Committee at their next meeting.

5. *Labour Control Committee*.—Mr. E. Lord, having resigned as South Travancore representative on the Palamcottah Labour Division Control Committee, a hearty vote of thanks was accorded to him for his services.

Proposed from the Chair that Mr. W. Gillespie be Active Member ; and proposed by Mr. F. G. Millar and seconded by Mr. A. P. D. Lodge that Mr. T. L. Jackson be Member-in-Waiting on the above Control Committee. *Carried*.

6. *U. P. A. S. I. General Committee Meeting at Ootacamund, February 23, 1926*.—Proposed by Mr. W. Gillespie and seconded by Mr. T. L. Jackson that Mr. A. P. D. Lodge be the Association's representative at the above meeting. *Carried*.

The U. P. A. S. I. Agenda and Budget for 1926-27 was discussed, and the Delegate instructed,

7. *Currency Notes (Refund) Rules.*—Letter No. 6995, dated December 10, 1925 from Secretary, U. P. A. S. I., was discussed. Proposed by Mr. W. Gillespie and seconded by Mr. A. H. L. White.

‘That this Association is willing to support the rules laid down by Government with a view to stopping the cutting of Currency Notes.’
Carried.

8. *An Act to Regulate the Mutual Obligations between Employer and Workman in place of Act XIII of 1859 repealed.*—The matter was discussed at length. Resolved to leave the question of the framing of a new Act to the Executive Committee as the Association did not wish to send a representative to act on a special sub-committee of the U. P. A. S. I.

9. *Provident Fund for Indian Employees of U. P. A. S. I.*—The Honorary Secretary read letter HO/27, dated January 5, 1926, from Director, Labour Department, and after discussion it was proposed by Mr. T. L. Jackson and seconded by Mr. W. Gillespie :

‘That this Association is against the proposed Provident Fund and suggests a nominal gratuity at termination of service.’

10. *Audit.*—The Honorary Secretary brought to the notice of the meeting that the auditor requested Rs. 30 for his services, and it was proposed from the Chair that this figure be accepted. *Carried.*

With a vote of thanks to the Chair the meeting terminated.

F. G. MILLAR,
Honorary Secretary.

ERIC HALL,
Chairman.

MONTHLY REPORT

OF THE

GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.,

FOR

JANUARY 1926.

I returned from leave, and rejoined duty on the 6th January. During the month, I remained at headquarters; and attended to office work except on the 30th when I went to Madras to see the Secretary.

Coffee Experiment Station, Sidapur. There was no rain during the month. A few high drizzles appeared during the last week but no appreciable quantity of rain fell.

Leaf disease is present in most of the plots, but all over the coffee looks well. The sprayed plots and the compost manured plots look the best; with a good show of young wood and well leafed. Spike is developing satisfactorily.

In the opener spaces in Kents the plants do not look well, but under shade look excellent. Jacksons look much better than last year, but only the sprayed plants are up to a fair standard.

In plot No. 4, where half the plants were sprayed from the time of planting and the other half unsprayed, the sprayed portion looks very much better than the other half. The young plants in plots Nos. 3, 26 and 27 are looking promising.

Harvesting of coffee was completed, and the crop on the whole was poor: 158½ bushels of coffee being obtained as against 469 bushels last year. Crops over the whole district were poor this season.

Tea Experiment Station, Peermade. 2.67 inches of rain fell over 8 days. The condition of the tea is good, but slight attacks of *Helopeltis* in plots Nos. 14, 15, 22 and 23 were found. Plots receiving the general mixture gave the best yields during the month.

Supplies are growing fairly well; a few failures are noticeable on the higher and dryer slopes. Six lines of low jat China are regularly sprayed with Vermisapon twice a week for prevention of *Helopeltis*, but no very marked effect is seen from the spraying. Fresh bites are found even on the sprayed bushes.

Green manure crops are being established with a fair measure of success. Seeds of the various kinds are being collected.

Two rounds of plucking were done and yields are as follows:

	Green leaf in lbs.
1st round of picking	... 1,042
2nd round of picking	... 1,353
	<hr/>
	2,395
	<hr/>

Rubber Experiment Station, Tenmalai. Rainfall for the month amounted to 3.71 inches distributed over 8 days in the latter part of the month.

The trees are wintering, while a few are already producing their new flush. Examination of all trees for brown bast was done, and 289 trees were found affected. These were treated by the isolation method.

Tapping was regularly done and was stopped on January 31.

Farm Manager, Chakrapani Marar joined duty on January 4th after availing of the new year holidays.

Rubber Experiment Station, Mooply. 3.06 inches of rain was recorded during the month on the 5th, 6th and 26th days. Normal wintering had not completely finished by the end of the month, the wintering in the sprayed areas being later than in unsprayed parts. A few of the earlier wintering trees are producing their new flush.

Tapping was done regularly during the month and was stopped on the 31st.

COIMBATORE,
March 3, 1926.

D. G. MUNRO.
General Scientific Officer,
U.P.A.S.I.

U.P.A.S.I. SPORTS CLUB

The 'Planters' Week' Teams

TENNIS

INTER DISTRICT—

Anamalais :—Collet, and Danagher.
 Central Travancore :—Farley, and Inman.
 Kanan Devans :—Hawkins, Pinches, and Swayne.
 Mundakayam :—Conner, and McPherson.
 Nilgiris :—Downing, and Cotton.
 Nil.-Wynaad :—Geddes, and Scott.
 U. P. A. S. I. :—Mackie, and Winterbotham.
 Wynaad :—Bayzand, and Davies.

GOLF

INTER DISTRICT—

Anamalais :—Bulteel, and Cooper.
 Kanan Devans :—Holden, and Laird.
 Nilgiris :—Colthurst, and Backhouse.
 Nil.-Wynaad :—Fulcher, and Nicolls.
 U. P. A. S. I. :—Brock, and MacDougall.

RUGGER

(We hope next week to be able to give the names of those who played in the Inter-District tournament for the Anamalais, the Kanan Devans, and the Combined Wynaad.—ED.)

U. P. A. S. I. TEAM vs. ROYAL ULSTER RIFLES—

Shields ; Mayow, Swayne, Gillies and McIntyre ; Stockwell and Davies ; Pryor, Hawkins, Jacks, Wright, Walker, R. Walker, Diaper and Nicholls.

CRICKET

U. P. A. S. C. vs. WELLINGTON GYMKHANA—

(U. P. A. S. C. won by 67 runs and had 6 wickets in hand.)

WELLINGTON

R. Jenkins b Dixon	...	36
R. Clayton-Danbery c and b		
Cowdray	...	4
Stewart l b w Naylor	...	15
A. Walker b Dixon	...	16
L. Lendrum c Flanagan b		
Dixon	...	10
F. Clayton Danbery st Inman		
b Dixon	...	0
Cole b Danagher	...	2
pt. J. R. O'Brien b Danagher		7
H. Hayes (not out)	...	9
T. M. Tate st. Inman b		
Cowdrey	...	28
A. C. S. Palin c Lodge b		
Dixon	...	3
Extras	...	10

Total ... 140

PLANTERS

W. J. Dixon l b w Lendrum	...	21
E. B. Flanagan retired	...	72
H. C. Swayne st. Stewart	b	
Walker	...	29
E. S. Conner c Cole b Jenkins	...	42
E. A. Cowdray st. Stewart	b	
Hayes	...	21
A. P. D. Lodge (not out)	...	15
The following players did not bat.		
H. J. C. Hammond, W. Inman,		
A. V. Danagher, D. Cooper,		
P. A. Naylor.		
Extras	...	7

Total (4 wickets) ... 207

U. P. A. S. C. *vs.* M. C. C.

(The result was a draw.)

M. C. C.—1ST INNINGS			
Jenkins b Collett	...	...	3
Lyttleton c and b Collett	...	...	5
Wimbush (run out)	...	...	47
Woodroffe b Naylor	...	...	9
Keenlyside c Hammond b Naylor	...	...	6
Crofton c Cowdrey b Lodge	...	...	54
Wynne b Cowdrey	...	...	32
Bulloch c Flanagan b Naylor	...	...	10
Stockwell c Connor b Lodge	...	...	22
Lendrum (not out)	...	...	70
Cundell (not out)	...	...	8
Extras	...	...	19

 Total (for 9 wickets) ... 285

M. C. C.—2ND INNINGS			
Jenkins c Lodge b Cowdrey	...	...	21
Lyttleton b Collett	...	...	23
Woodroffe b Cowdrey	...	...	14
Wimbush (not out)	...	...	24
C. H. Wynne b Cowdrey	...	...	0
Bulloch (not out)	...	...	12
(Remainder did not bat)	...	...
Extras	...	...	5

 Total (for 4 wickets) ... 99

PLANTERS—1ST INNINGS			
W. J. Dixon b Wimbush	...	...	3
G. W. Fulcher c Wimbush b Keenlyside	...	...	49
H. J. Hammond st Crofton b Keenlyside	...	...	1
H. C. Swayne c Keenlyside b Wimbush	...	...	3
H. S. Collett b Wimbush	...	...	2
E. A. Cowdray c Bulloch b Wimbush	...	...	101
E. S. Conner l b w Keenlyside	...	...	4
E. B. Flanagan (did not bat)	...	...
A. V. Danagher (not out)	...	...	24
A. P. D. Lodge l b w Wimbush	...	...	0
P. A. Naylor b Keenlyside	...	...	15
Extras	...	...	17

 Total (for 9 wickets) ... 219

PLANTERS—2ND INNINGS			
W. J. Dixon b Keenlyside	...	...	2
A. P. D. Lodge (not out)	...	...	16
H. G. Swayne c Bulloch b Lendrum	...	...	17
H. S. Collett (not out)	...	...	7
(Remainder did not bat)	...	...
Extras	...	...	4

 Total (for 2 wickets) ... 46

U. P. A. S. C. *vs.* OOTACAMUND

(Ooty won by a run and had 6 wickets in hand.)

PLANTERS			
Sir Fairless Barber c Jenkins b Anderson	...	...	0
G. W. Fulcher c Anderson b Wimbush	...	...	9
E. W. Geddes l b w Wimbush	...	...	4
H. J. C. Hammond c Vasudevan b Wimbush	...	...	9
A. P. D. Lodge b Anderson	...	...	71
D. Cooper l b w Wimbush	...	...	11
W. Inman c Chockalingam b Vasudevan	...	...	2
T. G. Stockwell (not out)	...	...	39
H. O. Davis b Cole	...	...	3
T. M. Tate l b w Anderson	...	...	9
H. Daubeney l b w Cole	...	...	3
Extras	...	...	16

 Total (for 10 wickets) ... 176

OOTY			
Jenkins c Tate b Daubeney	...	...	15
Mody b Cooper	...	...	83
Stewart l b w Geddes	...	...	54
Ramalu c Geddes b Fulcher	...	...	1
Appavu (not out)	...	...	4
Anderson (not out)	...	...	3
Wimbush, Chockalingam, Cole, Vasudevan and Parry (did not bat)	...	...
Extras	...	...	17

 Total (for 4 wickets) ... 177

FANCY DRESS

With reference to the FANCY DRESS RESULTS published on Page 164 of last week's issue, we are informed that it was Mr. Creswell who designed and tenanted 'The Glaxo Costume' which carried off the Men's Second Prize.

THE LONGEVITY OF HEVEA BRASILIENSIS

BY

F. G. SPRING, N.D.A., U.D.A., F.L.S., RUBBER
AGRICULTURIST, F.M.S.

Opinions have been expressed (see editorial, *The Straits Times*, Saturday, January 9, 1926), 'That a considerable proportion of the rubber in Malaya is now past its prime, which we should put at from 12 to 15 years. Bark renewal will not be as good. . . .'

The opinion of this Department is contrary to the above, in fact, directly contrary on estates where the rubber is grown under good environmental conditions. Even on estates where environment cannot be considered first class, the experience of the Department is not reflected in the above opinion, which might apply to estates where proper care to ensure soil fertility has not been taken.

Observations on the longevity of *Hevea brasiliensis* are being recorded and yields are being taken on trees around 30 years of age. The results, up to date, indicate that when depreciating yields per acre are found, the true cause lies not in the age of the tree but in bad environmental conditions brought about by a number of causes such as soil erosion, severity and quality of tapping, bad soil moisture conditions, impoverished soils and disease.

The problem of longevity of rubber trees is an extremely difficult one as there are so many influencing factors which require to be considered. What the rubber producer in the East is concerned with, is the commercial life of a tree growing under plantation conditions. The subject to be dealt with first is in respect of trees growing in their natural habitat, the Amazon region of South America.

Longevity of rubber trees in Brazil.—The age which *Hevea* attains in the virgin forests of Brazil is not known and it is only possible to form an idea thereof from the circumference of old trees. The following is a translation from the *Archief Voor de Rubber Cultuur*, 1921, page 21. 'Uli states that *Hevea* in its natural habitat attains a height of 40 metres—(say 130 ft.) and a girth of 5 metres (say 16½ ft.). Akers gives a photo of a *Hevea* of Mirary on the Madiera river with a circumference of 266 inches at a height of 3 feet. Even considering that *Hevea* is a quick growing tree, it will not be far wrong to estimate the age of such a gigantic tree at a century at least.' Lock refers to *Hevea brasiliensis* as often reaching a height of 90 feet whilst the circumference near the ground may exceed 12 feet and Wickham reports that under favourable conditions it attains a girth in the trunk of 12 feet. Pinching in his report on this subject quotes from Akers 'The Rubber Industry' (page 73) as follows:—'The girth of forest grown rubber trees varies to a marked degree in different localities of the Amazon valley. For mature trees it ranges from 50 to 200 inches in circumference measured at a height of 3 feet from the base of the trunk. Occasional examples

occur of the girth attaining such colossal dimensions as 300 inches. It is safe to consider the average girth of estrada trees in tapping as 100 inches or thereabouts and the average height 100 feet approximately. The age of the trees is extremely difficult to gauge with any degree of accuracy, owing to the absence of all reliable records in this direction. In the Madiera districts and elsewhere many trees are found that have been tapped for sixty years past, therefore they are probably not less than eighty years old, but the growth and development is so far influenced by surrounding conditions of locality, light, air, soil and exposure, that size cannot be regarded as a criterion of age.' From observations made by Irving, 'The Rubber Industry' Torrey and Manders, page 45, twenty to thirty years seems to be the very least that could be expected to produce a tree of tappable dimensions growing under forest conditions. Heavy underbrush retards the growth of a tree in the early stages of growth but makes of it a very hardy member of the forest tribe, no doubt a question of the survival of the fittest. In the *India Rubber World*, Vol. LV, No. 4, January 1917, page 209, the following particulars are given of a big Hevea tree in South America, stated to be probably the largest in the world by J. Simao da Costa in a letter dated Para, December 1916, to the Editor of the *India Rubber World*. This tree is 127 feet in circumference at the base and has a record of yielding for 120 days at the average of 22 lbs. of rubber per day. The tree is situated in Brazil and is exploited by a whole family—father, mother and several children—which divides its time between cultivating cereals for food and extracting the latex from this tree. It is said not to be the only giant tree in the region, in fact there are thousands but this is the largest being tapped. The land in the district is considerably higher than the surrounding land and the writer concludes that it was from the seeds of these trees that the Hevea found its way east and south of Brazil, since native Hevea is found as far south as the seventeenth degree, and as far east as the south of Maranhao. The writer expresses the opinion that this tree must have been growing long before Columbus discovered America.

Longevity of rubber trees under plantation conditions in the East.—The longevity of a field of Hevea cannot be arrived at with any degree of certainty. The following factors may have direct influence on the span of life of the trees. (1) Introduction of the crop into another country. Although Hevea appears to be admirably suited to Malayan conditions it is difficult to say what effect there may be on the life of the tree when it becomes acclimatized to conditions other than those of its natural habitat. (2) Fungoid disease and insect pests, (3) Soil conditions and deterioration of the soil by surface erosion or other causes, (4) Planting conditions, e. g., distance of planting and drainage and (5) Past treatment of the trees in respect of tapping and pruning.

It will be of interest to review the earliest plantings in the East. Unfortunately no careful records of some of those in Malaya were kept consequently it is difficult to ascertain the exact age of the respective plantings.

(To be continued next week).

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending March 6th, 1926

Bank Selling Demand Draft on London

1st	2nd	3rd	4th	5th	6th
18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending February 13, 1926	January 1 to February 13, 1926	January 1 to February 13, 1925
A. TEA (WEEK ENDING FEBRUARY 13, 1926)				s. d.	s. d.	s. d.
(a) <i>Anamallais</i> —			N. India.	1 9.45	1 8.95	1 8.00
Thayamudi ...	205	1 11½	S. India **1	10.44	††1 9.56	††1 7.41
Mukkottumudi ...	157	1 10½	Ceylon...	1 10.30	1 10.16	1 8.98
Periakaramalai ...	192	1 9¾	Java ...	1 6.48	1 5.52	1 3.24
			Sumatra.	1 8.61	1 7.74	1 7.02
			Nyassa-land.	1 6.73	1 6.47	1 4.77
(b) <i>Central Travancore</i>			Total ...	*1 9.46	†1 9.15	†1 7.77
Fairfield ...	96	1 10½				
Woodlands ...	62	1 10				
Glenmary ...	173	1 9¾				
Twyford 'White Hills' ...	117	1 9½				
(c) <i>Kanen Devans</i> —						
Letchmi ...	138	2 2				
Yellapatti ...	169	2 1½				
Chundavurrai ...	86	2 1				
Chockanad ...	103	2 0¾				
Periavurrai ...	150	2 0¼				
(d) <i>Nilgiris</i> —						
Glendale ...	100	1 9½				
(e) <i>South Travancore</i> —						
Hereford ...	92	1 8				
(f) <i>Wynaad</i> —						
Erramaculla ...	65	1 8½				

(b) COFFEE

SPECIAL CABLE, LONDON, MARCH 10, 1926

'A' QUALITY 143s. MARKET QUIET

London Prices (seven days ending February 16, 1926)

Mysore—

Yellikodigi ...	72	142	6	All grades
Woger ...	27	137	2	'P.B.' & 'T'
Abragay ...	16	115	2	'P.B.' & 'T'
Archully ...	16	109	0	'T' only
Voghully ...	11	109	0	'T' ,,
Bettadmane ...	7	109	0	'T' ,,

(c) RUBBER

The London quotation for Plantation first Latex Crepe on Monday, March 8, 1926, was 29d.

** Based on 3,476 packages.

†† „ „ 31,115 „

†† „ „ 26,282 „

* Based on 69,334 packages.

† „ „ 475,946 „

† „ „ 388,577 „

(d) *Précis of reports on the London Market received on Monday, March 8, and covering the seven days ending Tuesday, February 16 :—*

(1) *Tea.*—The figures recorded on the previous page show that the average price of South Indians during the week ending February 13 was almost 1*d.* more than the figure for the previous week. This is especially satisfactory as the rise in the average price for the tea of all countries was only 0·39*d.*

(2) *Rubber.*—Selling orders, absence of demand, and lower quotations from New York forced down the price still further ; and ' spot ' was done on Tuesday, February 16 at 28½*d.* London stocks rose slightly by 16 tons to 9,565 tons.

(3) *Coffee.*—During the seven days under review the market as a whole was extremely dull. The extra sales held on Friday, February 12, with a view to relieving congestion hardly achieved their object ; as the demand was far from active, and many sellers preferred to withdraw their lots rather than accept the lower prices which the buyers bid. The interest in the new East Indian Crop is reported to have been especially disappointing and 311 bags of Mysore were withdrawn as against the 149 bags whose sale is recorded on the previous page.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including Saturday, March 6, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	...	93·67	93·67	19. Coonoor ...	...	92·31	92·31
2. *Tenmalai.	0·26	103·25	103·51	20. Kotagiri ...	...	71·55	71·55
3. Mundakayam.	N. R.	156·84	N. R.	21. Ootacamund	...	53·19	53·19
4. *Peermade.	0·12	173·67	173·79	22. Yercaud ...	0·05	55·55	55·60
5. Twyford ...	0·09	202·44	202·53	23. Devala ...	N. R.	132·24	N. R.
6. V'periyar ...	N. R.	81·67	N. R.	24. Gudalur ...	...	74·65	74·65
7. Kalaar ...	0·12	212·34	212·46	25. CALICUT ...	...	134·54	134·54
8. Chittuvurrai	0·30	64·05	64·35	26. Kuttiyadi ...	0·06	179·44	179·50
9. BODI'KANUR	...	28·27	28·27	27. Vayittiri ...	0·18	160·31	160·49
10. COCHIN ...	0·93	110·85	111·78	28. Manantoddi.	0·69	110·87	111·56
11. *Mooply ...	0·27	116·21	116·48	29. Billigiris ...	...	69·19	69·19
12. MooplyValley	1·22	125·89	127·11	30. *Sidapur ...	...	74·44	74·44
13. Pachaimalai	N. R.	124·05	N. R.	31. Pollibetta ...	0·17	85·66	85·83
14. Mudis ...	0·96	202·53	203·49	32. Somwarpett	0·05	86·14	86·19
15. POLLACHIE.	...	30·18	30·18	33. Ballupete ...	N. R.	76·24	N. R.
16. Manjeri ...	...	126·58	126·58	34. MANGALORE.	...	139·40	139·40
17. Nilambur ...	0·17	101·26	101·43	35. MADRAS ...	...	63·35	63·35
18. Naduvattam	...	84·32	84·32				

W = During the week.

P = Previously. N. R. No return

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : **UPASI, Madras**

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 12] SAT., MARCH 20, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	185	Letters to the Editor—	
The late Mr. D. M. Cooper ...	186	Unseasonable Coffee ...	195
The Coffee Berry Borer ...	187	Coffee Queries ...	196
The Longevity of Hevea		The U.P.A.S.C. Funds ...	196
Brasiliensis ...	189	The U.P.A.S.C. Committee	
Monthly Report of the G.S.O.,		Meeting ...	198
U.P.A.S.I. ...	192	South Coorg District Notes ...	199
South Travancore Combined		Exports from S. India ...	200
Planters' Assoc. Meetings ...	193	Commercial and Meteorolo-	
		gical ...	201

EDITORIAL NOTES

We record with much regret the death of Mr. Dudley Cooper of Karamalai Estate, Valparai, who died of Enteric Fever on the 10th instant at Coimbatore. Mr. Stuart Hawkins has contributed a touching appreciation which appears elsewhere in this issue, and all our Readers will be grateful to him for the expression of heartfelt sympathy which he offers to Mrs. Cooper on their behalf.

We in the Madras Presidency are to be congratulated on having a Finance Minister who sees clearly that the Micawberian maxim: 'Income £100, Expenditure £99-19-6; Result Happiness: Income £100 Expenditure £100-0-6; Result Woe' is not an invariably safe guide for custodians of public funds. The Hon. Mr. Moir has not hesitated to allot Rs. 72.55 lakhs in his 1926-27 Budget to the nation building departments such as Public Works, Education, Medical, Public Health, Agriculture, and Industries; although doing so involved a deficit of Rs. 76.46 lakhs. As he truly said, progress and improvement 'in the wide field of our activities' should be uniform and steady and not a matter 'of spasms and jerks'. Since the preparation of the Budget, the financial position has of course been eased to the extent of the Rs. 57 lakhs which is the Madras Share of the Rs. 125 lakhs by which the total of the provincial contributions to the Central

Government has been reduced. The total of the provincial contributions fixed under the Meston Settlement was Rs. 9.83 crores, but the present reduction together with that made in the previous year brings the figure down to Rs. 5.45 crores. Our Readers will be especially interested to note that of the Rs. 72.55 lakhs mentioned above as having been earmarked for new works; Rs. 7.72 lakhs are to be expended on grants to local bodies for the improvement of bridges and of roads.

Ceylon Standard Wage Ceylon is perhaps still not unhopeful of being able to induce the Government of India to modify its insistence upon a minimum standard wage for the Indian immigrants employed on Ceylon Estates. Mr. T. Reid, Controller of Indian Immigrant Labour, has recently gone to Delhi to interview the Minister by whom the Emigration portfolio is held. Hot on his trail however has followed the Hon. Mr. K. Natesa Iyer of the Ceylon Legislative Council who, we understand, wishes to enlighten the Government of India regarding the Estate Labourers' point of view. He contends this has not been sufficiently considered by the Ceylon Official and Planting Interests which alone, in his opinion, are represented by Mr. Reid.

The Mercantile Bank of India, Ltd. The London Office of the Mercantile Bank of India, Ltd., cables that the Bank is declaring a final dividend of 8 per cent, making a total of 16 per cent less Income-tax for the year; placing to Reserve £50,000 which brings the Reserve Fund up to £1,350,000; and carrying forward £162,000.

D. M. COOPER

AN APPRECIATION

BY

STUART HAWKINS

It is indeed difficult to realize that Dudley Cooper, who was with us for Planters' Week, is now no more. Though he was not quite his usual self at Ooty, complaining at the end of the Week of a touch of fever, no one could have imagined that his end was so near, and the news of his untimely death at Coimbatore has come as a great shock to us all. I do not intend here to dwell on his capabilities as a Planter, though I well know what the Company which he represented thought of him; but I would wish to place on record the good work he did for our Sports Club. It should be remembered that the Club was not instituted with the sole idea of playing games; but rather as a means whereby the different planting districts and interests could get to know each other better, and there is really something of a high ideal in working for that end. Cooper put all his energy into it; and though he was not afraid to hold his own opinions he was never self-opinionated, and was always ready to fall in with the wishes of the majority whether they agreed with him or not. To those who have had most to do with bringing the Club into existence and carefully tending and nursing it through the first few years of its life, the memory of Dudley Cooper will always remain green, and the fact that he was again re-elected to the Committee only some three weeks ago proves what confidence the members had in him. He has now left us, and it is for us to carry on. I am sure not only members of the Sports Club but all members of the Planting Community would wish to express their deepest sympathy with Mrs. Cooper in her great loss.

THE COFFEE BERRY BORER.

BY

PROFESSOR H. A. BALLOU

Zoologist and Entomologist, Imperial College of Tropical Agriculture

In an article which appeared in *Tropical Agriculture* for February, 1924, entitled Coffee, reference was made to a serious pest of coffee which had made its appearance in Brazil. This insect is a small beetle known as the coffee berry borer (*Stephanoderes coffeae* Hag). This and *S. hampei* have been recorded from the Dutch East Indies, East and West Africa and Uganda, and there has been some doubt whether these two names refer to the same insect or whether they apply to one and the same species. The fact remains, however, that in the countries mentioned, Dutch East Indies and what amounts in general terms to the coffee growing localities of Tropical Africa, there is a pest of coffee which attacks the berries, causing severe damage.

In Africa the injury does not appear to be so serious. In Java and Sumatra it has been much more noticeable in recent years. Within the past five years, probably, the berry borer has become a pest of coffee in Brazil.

The Tea and Coffee Trade Journal, New York, has published articles on this insect and has frequently referred to it in the general news items on coffee in Brazil. In the issue for November, 1924, there appears the report of a commission appointed in May, 1924, by the Secretary of Agriculture, to investigate the insect in Brazil. The report states that the insect had undoubtedly been present in the coffee plantations in the Municipio Campinas for at least three years.

At the time of the investigation 2,000,000 trees were strongly attacked; about 6,000,000 notably contaminated, and in about 30,000,000 trees the degree of infestation was medium, in addition to the trees under suspicion on account of their situation with regard to the infested zones. The insect was found to infest all varieties of coffee, attacking the berry only, and no other food plants were discovered.

The insects penetrate the pulp and tunnel into the seed, the eggs being laid in the entrance tunnels of the parent female. The whole life cycle is passed in the coffee fruit, and it appears that often, without leaving the berry, the females of the next generation lay eggs in the same fruit and the destruction of the fruit is continued. No parasites or other natural enemies were found.

It was recommended that the washing of coffee in infested areas should be completely abolished, as the insects would be carried down the water courses and thus serve to infest new areas. Immersion of the fruits for from 40 to 80 hours did not prove fatal to the insects in them and they also, survived drying in the yards for 15 days exposure to the sun. Fumigation of the picked coffee with carbon bisulphide at the rate of 400 grammes in each 100 cubic meters, for 36 hours, has been found a satisfactory treatment, while preliminary trials with fermentation of the picked coffee promised favourable results. It was believed that the fermentation of the coffee pulp will produce a temperature sufficiently high to prove fatal to the insects.

In more recent numbers of the *Journal*, those for 1925, there is further information on this subject. In the May number, it is stated that the coffee berry borer in Brazil is a native of South America and that it occurs in Surinam where it has been known for some years. In this Dutch Colony, however, the insect does not tunnel into the seed, confining its attack to the pulp and consequently the loss to the grower is not great. It is stated, also, that previous to a few years ago the behaviour of the *Stephanoderes* beetle in Java was similar to what it is at present in Surinam.

The statement that *S. coffeae* and *S. hampei* are two distinct species and that *S. coffeae* has changed its habits from being merely a borer in the pulp of the coffee berry to tunnelling into the seed will probably be taken under further consideration and either be confirmed or amended.

The Defence of Coffee Service under the direction of the Secretary of Agriculture, Commerce and Public Works has been created for the purpose of combating the coffee berry borer and enforcing the laws which are made in this connection. This Service has undertaken the work with great energy, but many planters are slow to co-operate even where co-operation is in their best interest. The methods of combating this pest in the attempt to prevent its spread and to reduce its abundance in infested territory are fairly simple but, on the whole, rather expensive.

The Government has passed a law that all coffee reaped in the infested districts shall be fumigated with carbon bisulphide before being taken to the treating platform. Strict precautions are adopted to prevent any infested fruits being carried out of the infested district to those where the insect is not known to occur, and all fallen fruit is to be most carefully collected from the ground and burned. A very essential practice is that of 'repicking,' the careful going over all the trees after the crop is reaped and removing all the fruits, ripe or immature, that may have been left on the trees after the reaping.

It has been found that the life cycle of the coffee berry borer is about two months, and it is believed that if a close season of three months, that is, a period of three months with no fruit on the coffee trees, could be established it would do much to reduce the severity of the attacks in the following season.

A prominent coffee planter from Java who recently visited Brazil, in contrasting the condition under which coffee was grown in these two places, considered that the pest would be more difficult to control in Brazil than in Java. In Java the loss to the grower was sometimes as high as 80 per cent. of the crop. The coffee was mostly grown by large companies, but cultivations were in comparatively small areas and widely separated from each other and labour was abundant. In Brazil, the coffee estates were in the hands of individual owners, but they were close together so that there were enormous tracts of unbroken coffee cultivation. The companies generally are more willing to spend money on maintenance and pest control than individual owners, and the existence of large uninterrupted areas of coffee cultivation facilitate the rapid spread of a pest such as the coffee berry borer which is not given to long-sustained periods of flight. The labour supply in Brazil did not seem to be adequate to the repicking operations which in Java have been found to be absolutely essential to any degree of control of this pest. Taking these points into consideration the Java

planter did not think the prospects very good for the successful control of *Stephanoderes coffeae* in Brazil.

In this connection, it is reported that it has been found in Java that different varieties are attacked in different degrees of severity, and it is believed that the plant breeder can make use of this in producing a less susceptible variety, and at the same time, induce a fairly long resting period in the fruiting of the coffee tree. If a variety can be produced which is not very susceptible to attack, and, at the same time, this variety develops a period of two or three months when no flowers and fruit are being produced this would be of great assistance in helping in the control of a most serious pest.

The results of the work of controlling the coffee berry borer in Brazil by a service supported by the Government should be of interest to coffee planters and Agricultural Department officials in the British Colonies of Tropical Africa. The insect appears to be widely distributed in Tropical Africa and in those localities where it does not exist the greatest effort should be made to prevent its introduction and where it is known to occur the methods of control should be studied. In Java, a hymenopterous parasite is reported to have been discovered recently, but at present it does not appear to occur in any great numbers. Other parasites may be discovered in other places, and it is possible that in some districts the berry borer will be found in small numbers, doing little damage, accompanied by a parasite which in most seasons keeps it in check. Such a discovery would be of importance in the colonies where the coffee growing industry is being developed and extended.

' Tropical Agriculture

(We compiled an article on this subject for the *Planters' Chronicle* of July 25, 1925. Ed.)

THE LONGEVITY OF HEVEA BRASILIENSIS

BY

F. G. SPRING, N.D.A., U.D.A., F.L.S., RUBBER
AGRICULTURIST, F.M.S.

(Concluded from Page 182, issue of March 13, 1926)

In the Gardens Bulletin, S. S. Vol. I, No. 8, information is given regarding the introduction of Hevea into the Colony. The first consignment from Kew of Hevea seedlings reached Singapore Botanic Gardens, in 1876. Some were saved for at least a year but no record exists showing their further history. Twenty-two seedlings, a second consignment, sent a year later, arrived in June, 1877, and more than half of the number was planted in the Botanic Gardens. Nine plants were taken to Kuala Kangsar and planted behind the Residency. The first tree to flower in the East appears to be one of these nine trees for it is recorded that a tree at Kuala Kangsar flowered in March, 1880, at the age of 3½ years but did not set fruit until its third flowering in 1881. Probably in 1883 trees first fruited in Singapore. The Singapore seed crop was at first used up between the Botanic Gardens, Singapore, Sarawak, Kuala Kangsar, Kuala Lumpur, and Malacca. The

smaller Kuala Kangsar crop increased the local plantation and supplied the seedlings which became widely distributed there and over Perak and others in Selangor and Negri Sembilan.

I inspected a few of the old Kuala Kangsar trees on April 19, 1925. The trees are healthy looking in appearance and have fine branch and leaf development. They are now 42 years of age, and in spite of excessive over tapping in former years they look as if they will live for many years yet. These trees have not been tapped for several years.

Most the old trees on Welds Road, Kuala Lumpur, said to be planted between the years 1895 and 1899 have been cut out. I examined two of those remaining. No. 1 has a girth of 6 feet 9 inches measured 3 feet from the ground and contains 24 latex vessel rows, one foot from the base while tree No. 2 has a girth of 6 feet and 11 latex rings at similar heights. The trees look healthy and one of them has excellent branch and leaf growth.

In October, 1898, 1306 rubber seedlings were planted out near the Offices of the Department of Agriculture, F. M. S., and S. S. spacing 18 ft. by 18 ft.

The trees were raised from seedlings obtained from the Botanic Gardens, Singapore. A record was kept of the yield of a group of 48 of these trees during the year 1923 and found to be 412 lbs. of No. 1 rubber. The number of trees to the acre in 1923 was 65. The average girth measured 3 feet from the ground on 21.5.25, was 55 inches. As is common with other old areas the trees have been most severely tapped in past years and considering all things I think the yield of these 27 year old trees is satisfactory as it works out at 558 lbs. of No. 1 rubber per acre, per annum.

The first plantation in Ceylon is from the original seed procured by Wickham from the Amazon in 1876 and particulars are given in Bulletin No. 4, Hevea, Yields of some Heneratgoda Trees, published by the Department of Agriculture, Ceylon. The plants reached Ceylon towards the end of that year, and were planted at Henaratgoda in 1877. The Plantation contains 40 trees planted irregularly. The second plantation was established about ten years later, in about 1886 with seed from the original trees. One tree at Henaratgoda known as No. 2, planted in 1877, has a circumference of 137 inches at 3 feet from the ground. It is reported that some of the original 1876 trees of Wickham's stock are still living in Ceylon in the Experimental Gardens at Peradeniya and Henaratgoda. In Lower Burma, at Mergui on the property belonging to Mergui Crown Rubber Co., many of the original trees sent over from Ceylon, in 1878 still flourish.

GENERAL REMARKS

The rubber plantation industry is not sufficiently old to enable one to say what the length of life of Hevea may be, or even to state, with any degree of accuracy, the period over which a field of rubber trees will continue

to yield a supply of latex sufficient to make it a paying proposition. One of the chief factors to be reckoned with is disease. Many of our old trees have been lost by fungoid diseases and insect attacks. In areas which have been severely thinned out one cannot afford to keep on losing trees year after year as there might then come a time when the number of trees to the acre is so small that a replanting programme may be necessary. Special supervision in such fields is required in order to endeavour to maintain the number of trees, per acre, at a reasonable standard. The replanting of diseased areas is a matter for investigation but it does not come within the scope of this report.

Soil erosion is another factor which may have a direct influence on the life of a tree. It is not reasonable to expect trees to continue to flourish in badly washed and impoverished soils for as long a period as trees growing in fertile soil conditions. Fortunately, however, most estates are now taking precautions to reduce soil erosion to a minimum.

The question of bark renewal is most important. In the 'Third Report of the Executive Committee to the Members of the Rubber Research Scheme, Ceylon,' Petch writes, 'An inspection of some of the oldest trees in Ceylon has been made for the purpose of estimating the probable life of rubber trees under estate conditions. It would appear that after 30 years of age bark renewal is very slow and the power of recuperation of the trees is much less than with younger trees. However, from the examination made it was not possible to make any determination of the probable life of rubber trees in Ceylon.'

In the same publication Taylor states, 'An examination of the trees on the old Government Plantations at Yatipauwa and Edangoda has been made with the view to securing some estimation of the probable life of Hevea under estate conditions. These trees have received varied and somewhat severe treatment, and it is probable that under present conditions the life would be materially prolonged. Without further information than that furnished by these trees it is not possible to estimate the probable economic life of Hevea in Ceylon.'

Practically all old trees have been severely tapped in the past and it is likely that better cultivation of the estates, conservation of the surface soil, conservative systems of tapping and good quality tapping will result in a longer period of increased yields but it should be remembered that plantation trees may possibly show signs of age earlier than trees growing in their natural habitat.

It is proposed to publish further information on yields from the oldest trees in Malaya, grown under varying conditions at a later date.

MONTHLY REPORT
OF THE
GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.,
FOR
FEBRUARY 1926

From the first to the 7th I was at head-quarters. On the 8th I left for the Wynaad, and from there went to Coorg on the 12th. I reached Ootacamund on the 19th night, and returned to head-quarters on the 27th. Along with the Chairman, United Planters' Association, sites were selected for Bungalow and Laboratory at the New Tea Station, Woodbriar.

Coffee Experiment Station, Sidapur.—No rain fell during the month, although surrounding estates had rain amounts varying to over 1 inch. During my tour in Coorg I inspected the station, and took over a dozen planters from North and South Coorg over it during that time. The sprayed plots stand out in appearance, carrying a great show of leaf and wood. Prospect for next year's crop are good. This is probably in part due to the light crop borne last year.

In the Kents and Jacksons plots there is a slight attack of leaf disease, and Kents looks ever so much better than Jacksons. In the varietal plots Robusta and Halls look excellent. The young Kents raised from selfed seed or coming away well, but some of them are beginning to feel the effects of the drought.

Tea Experiment Station, Peermade.—No rain fell during the month and the tea is feeling the effects of the drought. Crop is diminishing, and young supplies require moisture.

Helopeltis attack is decreasing and becoming less severe. Spraying with vermisapon was continued in plot No. 22; $\frac{1}{2}$ oz. vermisapon per gallon being the strength used and applied twice weekly. The yield of the sprayed part was about twice that obtained on the unsprayed portion; and the percentage attack calculated on plucked shoots was 15 per cent on the sprayed as against 40 per cent on the unsprayed plots.

Most of the Green manure crops have seeded, and the seeds were collected and sold.

Rubber Experiment Station, Tenmalai.—Two showers on the 1st and 28th respectively giving a total of 0.61 inches was the only rain recorded.

Most of the trees have got their new flush on. Tapping was not done during the month, except in plots A to F.

Drains have been cleaned and the earth put on the top side on the drain to form terraces.

Rubber Experiment Station, Mooply.—Only .04 inches of rain was recorded. Normal wintering is over except in the sprayed plot where even now some trees retain a few old leaves.

No tapping was done except in plots 23 and 23A.

COIMBATORE,
March 12, 1926.

D. G. MUNRO,
General Scientific Officer,
U.P.A.S.I.

DISTRICT ASSOCIATION MEETINGS

TRAVANCORE COMBINED PLANTERS' ASSOCIATION

Minutes of the 12th Annual Meeting held in the Quilon Club
on Saturday, February 20, 1926.

Present

Messrs. A. J. Wright (*Chairman*), Kanan Devan Hills Planters' Association; R. J. Macmullin, Central Travancore Planters' Association; F. Hawkings, Mundakayam Planters' Association; and L. A. Lampard, *Honorary Secretary* (representing Messrs. Harrisons and Crosfield, Limited).

Notice calling the meeting was read, and the agenda were as follows :—

Minutes of last meeting.

Honorary Secretary's report and submission of account.

Income-tax—Edavagai lands.

Licensing of Tea Dealers.

Subscription for 1926.

Subjects for Sri Mulam.

Correspondence.

Election of Office Bearers for 1926.

Any other business brought forward.

The Minutes of the meeting of March 7, 1925, were confirmed.

The Honorary Secretary read his report for the year. This and the accounts (reproduced below *Ed.*) were adopted on the motion of Mr. A. J. Wright and seconded by Mr. Hawkings. A vote of thanks was accorded to the Honorary Secretary, Honorary Auditor and Mr. Mackie for their services during the year.

Income-tax.—The events of the past year in connection with income-tax on the produce of Edavagai lands were brought to the notice of the meeting and the matter was discussed by the various delegates. It was pointed out that, although the Dewan had accepted a deputation on the subject, no definite pronouncement had yet been made. It was agreed that the Dewan should be urged to make a definite pronouncement and the following resolution was proposed by Mr. Hawkings and seconded by Mr. Macmullin.

'That all the Sri Mulam delegates present join with the Mundakayam Planters' Association delegate in requesting the Dewan to meet them for the purpose of obtaining from him a statement of his views and intentions with regard to the Income-tax Amendment Bill.'

This was passed.

Mr. Wright who has had a long experience of Sri Mulam procedure pointed out that there were difficulties in the way of obtaining an interview of the Dewan during the busy time of Sri Mulam. He promised, however, to do what he could to arrange matters.

Licensing of Tea Dealers.—Mr. Wright informed the meeting that his Association had been in correspondence with the Mundakayam Planters' Association and the Central Travancore Planters' Association with regard to licensing Tea Dealers on somewhat the same lines as is now done with Rubber dealers. The idea of the license is to help to overcome the trouble of pilferage and theft. The Kanan Devan Hills Planters' Association has no definite complaint to bring forward, but it was understood that trouble had been experienced in the Central Travancore Planters' Association district. All the Delegates were prepared to support one another in the request for legislation, but it was felt that the Central Travancore Planters' Association should bring forward definite instances of theft and pilferage before a good case can be taken to Government.

Subscription for 1926.—It was proposed by Mr. Wright and seconded by Mr. Macmullin that the subscription should be fixed at Rs. 10 per annum for 1926. This was passed.

Subjects for Sri Mulam.—The subjects were discussed in detail by the delegates and it was decided that mutual support would be accorded.

Correspondence.—The correspondence exchanged by the Association during the year was placed before the meeting and all important items were discussed. As a result of this discussion the following resolution was brought forward by Mr. Hawkings:—

‘That the Travancore Combined Planters' Association appoint a Reader or arrange with some Vakil to study the *Government Gazette*, the Council Proceedings, and the Press; and so keep the Associated Estates informed of questions raised affecting Planting interests in the State.

The resolution was seconded by Mr. Wright and carried. The Honorary Secretary was instructed to make enquiries and submit a suggestion for carrying out the above resolution. It was felt that Messrs. Harrisons and Crosfield, Limited, being closely in touch with Government Circles and Planting Politics could possibly assist in the matter.

Following on the above discussion it was felt that more benefit could be obtained from the Planting Member if touch was maintained with him more consistently. The following resolution was proposed by Mr. Wright, seconded by Mr. Macmullin and passed:—

‘That the Planting Member of the Legislative Council be asked to communicate all matters of interest to the Honorary Secretary of the Travancore Combined Planters' Association.’

The Chairman then tendered his resignation and was accorded a vote of thanks.

Office Bearers for 1926. Mr. A. J. Wright was re-elected Chairman. It was decided to ask Mr. J. R. Vincent if he will accept the position of Vice-Chairman. Mr. L. A. Lampard was elected Honorary Secretary.

There being no other business the meeting then terminated.

L. A. LAMPARD,
Honorary Secretary.

A. J. WRIGHT,
Chairman.

Income and Expenditure Account for the 12 Months ending December 31, 1925.

[illegible]

<i>Income and Expenditure</i>			
Balance at credit at January 1,			
1925	813 7 2
<i>Deduct</i>			
Excess of Expenditure over In-			
come January 1 to December			
31, 1925	340 9 6
			<hr/>
			Rs. 472 13 8

Cash with Messrs. Harrisons and Crofield, Limited—			
On Deposit account	...	200	0 0
„ Current account	...	272	13 8
			<hr/>
		Rs. 472	13 8

QUILON,
January 15, 1926.

Honorary Secretary.

(The 'Planters' Chronicle' is not responsible for the opinion of its correspondents.)

'THE PLANTERS' CHRONICLE',
MADRAS.

I wonder if some coffee expert can throw light on the subject of 'Out of season coffee trees'; by which I mean those trees which are always more or less in a condition of bearing crop and blossom at all times of the year except the right time. Did they start life as well ordered plants and develop the vice later in life; or were they ill-gotten at the commencement of their evil career?

I am inclined to think that the former is the case; as I have been waging war on them for years, and still they appear where I have not noticed them before. Again, I have never, so far as I can remember, seen a young tree of this kind.

MYSORE STATE,
March 16, 1926.

Yours, etc.,
' GUNDAGIDDA '

Coffee Queries

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

I shall be much obliged if you or any of my brother planters will kindly enlighten me with their valuable opinion on the following points:—

(1) Whether virgin jungle is to be preferred to worn out coffee estates for tea cultivation? In the latter case, there is some advantage, viz., clearings of the jungle, the existing roads, cooly lines, bungalow, lining, acquaintance of the locality and the neighbourhood, facility for labour, supply of provision, etc. Besides the soil is in a pulverised condition owing to previous cultivation and manuring.

(2) Will it not suffice to apply the manure, bulky or chemical mixtures to coffee without raking and reputting the mulch, an item of some considerable expense? It is to be admitted that a great portion of the manure will be on the mulch, although it is supposed that the mulching is raked.

(3) Admitting that it is profitable to manure coffee after the monsoons how is the manure to be stored in a cheap manner? Supposing a big pit is dug and manure filled in, to avoid the store building, will the manure be preserved safe over the monsoons without any damage?

Thanking you in anticipation.

KAPRIGUDDA, MANGALORE,
February 18, 1926.

Yours, etc.,
S. L. MATHIAS,
*Proprietor of Merthi-Subbangudigy
and other estates, Balehonnur P.O.,
Kadur Dt.*

The U.P.A.S.C. Funds

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

It has been suggested that money might be raised for the Sports Club by having a Cross Word Puzzle. I herewith send* one with rules, etc.

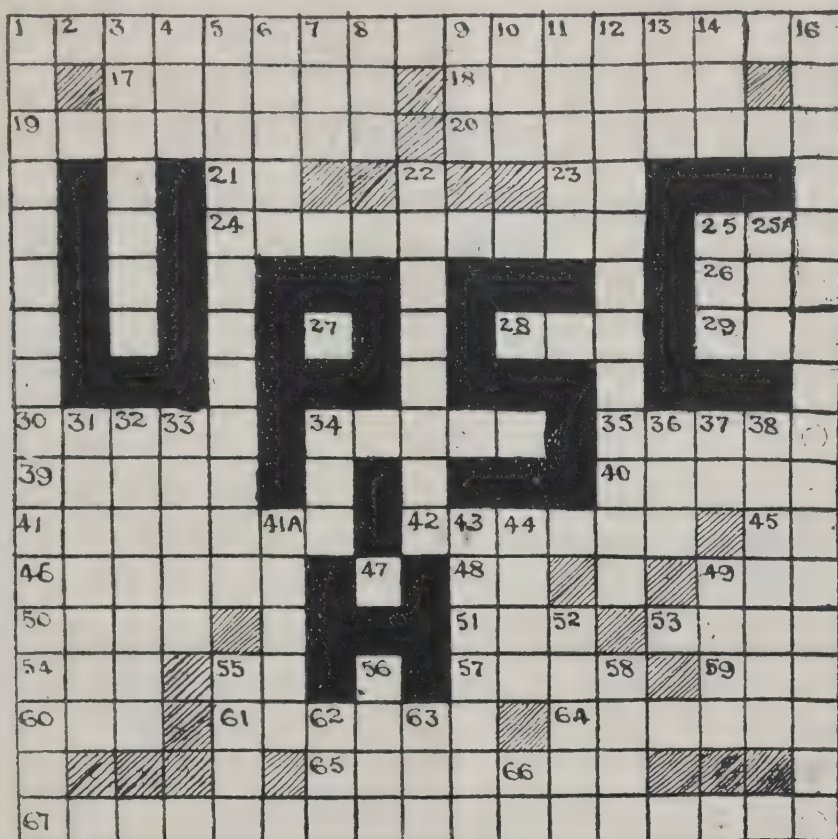
1. Entrance fee Re. 1 to accompany solution.
2. If more than 50 entries are received a prize will be given.
3. The first correct solution opened on April 9 will win the prize.
4. The author's decision to be considered final.

No books of reference beyond Dictionary are needed.

Entries to be sent in to The Editor, *The Planters' Chronicle*, Post Box 155, Madras, before April 9, marked on envelope 'Cross Word.'

'BINFIELD', KILPAUK,
March 12, 1926.

Yours, etc.,
M. E. WADDINGTON,



ACROSS

1. Capacity for understanding much.
17. Approach to a house.
18. Ancestral.
19. One who admits.
20. Prophetic.
21. Branch of army.
23. Article.
24. American quadruped.
25. Tree in Sandwich Islands.
26. Edible root.
27. Twice yourself.
28. Popular meeting place.
29. Before.
30. Obtain again.
34. Running water.
35. Twist.
39. Native garment.
40. Hair dye.
41. Induction.
42. Garden flower.
45. Keeper of the Rolls.
46. Calm.
47. Query.
48. Pronoun.
49. 102.
50. Society for Preventing Labour Rules.
51. High artistic Honour.
53. Little bit.
54. Points of the Compass.
55. Exist.
57. Generic man.
59. Inhabitants of Europe.
60. Colour (reversed).
61. No Colour.
64. Excise duty.
65. Common complaint with school boys.
67. Has $1\frac{1}{2}$ feet.

DOWN

1. Vapidness.
3. Shapeless piece.
4. Page 6. (abbreviated).
5. Recantation.
6. Go in.
7. Colour.
8. Ever (poetic).
9. Juice.
10. Connected with ruins.
11. Essential.
12. Concerning races.
13. New art border (abbreviated).
14. Ell (absolute).
16. Doctrine of special grace in certain religious rites.
22. Tooth like.
25. Scotch cows.
- 25A. Light pole with flattened end.
31. Good digestion.
32. Twisted 33. One who collects bird's eggs.
34. Insect.
36. Meadow.
37. Article.
38. One who encourages.
- 41A. Twin.
43. Two handled jar.
44. Looked up to by all.
49. Tuft of hairs on a seed.
52. Kind of violin.
55. Native clerk.
56. Take shelter together.
58. A fetish.
62. Popular boy's paper about 1886 (abbreviated).
63. Boy's name (abbreviated).
66. Anti-Labour (abbreviated).

(Competitors who wish to preserve their 'Chronicles' intact may copy the diagram on to a separate sheet; but in either case don't forget to enclose your name and address. ED.)

U. P. A. S. I. SPORTS CLUB

Proceedings of a Committee Meeting held on February 19, 1926, at the Ootacamund Gymkhana Club.

Present

Mr. J. Stuart Hawkins (*President*), Mr. B. M. Behr, Mr. D. Cooper, Mr. H. Waddington (*Treasurer*), and Mr. G. W. Fulcher (*Honorary Secretary*).

CLUB COLOURS.—None of the badge designs sent in for the recent competition was considered suitable for the Club, and it was decided to leave the matter over for decision at the General Meeting.

MEMBERSHIP.—Read letter from Capt. Nixon regarding hardship of present rules on members in Mysore. It was with regret decided that no alteration could be recommended to the General Meeting.

Planters' 'Week'

TENNIS.—

Inter District.—Davis Cup scoring.

That two singles be played first and then the doubles. If the match be not then decided, the remaining singles to be played.

Cost of Balls.—That a small entrance fee be charged in future for Competitions other than Inter District to help cover the cost.

Veterans Cup.—It was decided that this Competition be a handicap one.

MEMBERS' EXPENSES.—It was decided to recommend to the General Meeting that the sum of Rs. 1,600 be paid out of Club funds for this year's Meet for the purpose of helping to defray the cost of travelling of members whose salaries are less than Rs. 450. The division to districts to be made on the basis of the number of men, and distances travelled from each district.

PRIZES.—The kind offer of Sir Fairless Barber to defray the cost of the Inter District Tennis miniatures for this year was very gratefully accepted.

THANKS.—A vote of thanks was passed to Mr. Cockaine of *The Planters' Chronicle* for the great help he has given in advertising the Meet.

With a vote of thanks to the Chair the meeting ended.

G. W. FULCHER,
Honorary Secretary,

STUART HAWKINS,
President.

DISTRICT NOTES

South Coorg

CRICKET

SOUTH COORG *versus* NORTH COORG

A full day's cricket match was played at the South Coorg Gymkhana Club on Sunday, March 14. North Coorg came down in great strength; and a twelve aside match was played, in good weather, and before quite a large number of spectators.

North Coorg won the toss, and decided to bat, and were batting up to tiffin time, when both sides adjourned to the Bamboo Club. After tiffin the remaining batsmen of the North Coorg side were soon got rid of, and the South Coorg commenced their innings about 3 p.m. The North Coorg side had run up a very respectable total of 179, of which Sprott and Nicolls made 78, and Richardson 24, who were the chief scorers. Madappa six wickets, Pitcairn and Harper two each, and Roberts one wicket were the bowlers.

South Coorg opened disastrously: two wickets being down before any score had been made. Then Roberts and Madappa got going, and the 'tail' wagged merrily, and 128 runs were recorded. Reid, Madappa, Roberts and Cunningham were the chief scorers. Richardson and Sprott three wickets each, Macpherson and Morgan two wickets each, and Maurice one, were the bowlers.

The match ended in a win for the North Coorg side by 51 runs. Two matches have been played this year, and honours have been even, the South Coorg side having won their 'away' match last month.

It was a most enjoyable game, and both sides fielded very keenly. Appended are the scores:—

NORTH COORG				SOUTH COORG			
Cox bowled Madappa	...	...	3	Madappa b. Richardson	...	...	23
Sprott (Capt.) c. Tipping b. Roberts	...	47		Kuttapa c. b. Sprott	...	...	0
Nicolls c. Cunningham, b. Pitcairn	...	31		Muttana c. Irons b. Sprott	...	...	0
Macpherson b. Pitcairn	...	11		Roberts b. Richardson	...	...	23
Richardson L. B. W. b. Harper	...	24		Harper b. Richardson	...	...	0
Maurice c. T. Aylmer b. Madappa	...	10		Tippets-Aylmer b. Macpherson	...	...	15
Morgan (run out) b. Madappa	...	15		Pitcairn L. B. W. Maurice	...	...	12
Irons b. Harper	...	6		Tipping c. b. Macpherson	...	...	1
Clode c. Pitcairn b. Madappa	...	6		Raid (Capt) c. Maurice, b. Morgan	...	...	26
Gray b. Madappa	...	1		Cunningham b. Morgan	...	...	17
Lee c. Pitcairn, b. Madappa	...	0		Morris (not out)	...	...	3
Potter (not out)	...	2		Wilson c. Morgan b. Sprott	...	...	2
Extras	...	23		Extras	...	...	6
		179					128

DANCE AND SUPPER

By the kind invitation of Messrs. Irwin and Morris, a very enjoyable dance and supper was held at the Bamboo Club on Friday evening, March 12. A large number of the North Coorg and South Coorg planters and their wives attended.

YOUR HONORARY CORRESPONDENT.

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING JANUARY, 1926									
From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia	
<i>Coffee—</i>									
Madras	2,293	...	27	...	...	...	...	...
Calicut	91	...	385	693	...	...	...	...
Mangalore	51	...	8,731	3,934	442	...	...	200	
Tellicherry	...	...	3,494	1,261	...	...	...	...
Bombay	...	...	603	...	335	9	...	100	
Total	2,435	...	13,240	5,888	777	9	...	...
Previously	...	...	...	...	...	...	...	300	
Total cwts. since 1-1-26.	22,649	...	13,240	5,888	777	9	...	...
<i>Rubber—</i>									
Calicut	...	...	...	...	...	...	...	...
Cochin	...	129,900	113,442	17,549	...	...	48,999	...	
Mangalore	...	231,378	192,488	12,720	...	...	110,919	...	
Tellicherry	...	37,362	...	...	...	...	...	...
Tuticorin	...	...	19,954	...	...	...	...	...
Alleppey	...	88,933	...	...	...	...	...	...
Total	...	232,812	75,395	...	...	...	10,790	...	
Previously	...	720,385	401,279	30,269	...	...	170,708	...	
Total lbs. since 1-1-26.	1,322,641	...	...	...	...	...	...	...
<i>Tea—</i>									
Madras	2,068	...	180,665	380	...	...	...	...
Calicut	48,374	81,634	1,041,145	...	...	...	5,100	...	
Cochin	27,508	10,907	446,980	...	...	2,040	...	...
Mangalore	490	...	5,302	...	...	...	...	...
Tellicherry	...	1,575	44,711	...	...	...	...	...
Tuticorin	...	293,933	1,141,066	...	...	...	...	...
Alleppey	...	37,726	76,646	...	...	...	...	...
Total	78,440	425,775	2,936,515	380	...	...	...	...
Previously	342,281	3,137,822	28,588,937	1,058,361	9,319	2,040	5,100	...	
Total lbs. since 1-4-25.	36,671,443	3,563,597	31,525,452	1,058,741	9,319	7,935	78,728	1,850	
							83,828	1,850	

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending March 13th, 1926

Bank Selling Demand Draft on London

8th	9th	10th	11th	12th	13th
18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.	18 1/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending February 13, 1926	January 1 to February 13, 1926	January 1 to February 13, 1925
A. TEA (WEEK ENDING FEBRUARY 13, 1926)				s. d.	s. d.	s. d.
(a) <i>Central Travancore</i>			N. India.	1 9.45	1 8.95	1 8.00
Pasumalai	95	1 9½	S. India	**1 10.44	††1 9.56	††1 7.41
Cheenthalaar	123	1 8¾	Ceylon...	1 10.30	1 10.16	1 8.98
Twyford and Ashley.	191	1 6½	Java ...	1 6.48	1 5.52	1 3.24
			Sumatra.	1 8.61	1 7.74	1 7.02
			Nyassa- land.	1 6.73	1 6.47	1 4.77
			Total ...	*1 9.46	†1 9.15	†1 7.77
(b) <i>Kanen Devans—</i>			(b) COFFEE			
Guderales	162	1 11½	SPECIAL CABLE, LONDON, MARCH 17, 1926			
Sevenmallay	230	1 10½	'A' QUALITY 143s. MARKET QUIET			
Kalaar	158	1 10½	London Prices (seven days ending February 23, 1926)			
Nettigudi	195	1 10	Coorg—	bgs.	s. d.	grades.
			Craige Eliza...	45 123 10		1,2, PB & T
			Covercooly ...	29 119 11		2,3, PB & T
			Santagherry ...	30 118 5		Do.
			Santicoopa ...	45 116 5		Do.
(c) <i>Nilgiris—</i>			Nilgiri—			
Sutton	48	1 8½	Mailoor	64 137 3	All.	
(d) <i>Wynaad—</i>			(c) RUBBER			
Elstone	40	1 7½	The London quotation for Plantation first Latex Crepe on Monday, March 15, 1926, was 30½d.			

** Based on 3,476 packages.

†† „ „ 31,115 „

†† „ „ 26,282 „

* Based on 69,334 packages.

† „ „ 4,759,466 „

† „ „ 388,577 „

(d) *Précis of reports on the London Market received on Monday, March 15, and covering the seven days ending Tuesday, February 23 :—*

(1) *Tea.*—As the London Tea Brokers' Association's Weekly Tea Market Report for the week ending February 20 did not come to hand on Monday, we have only been able to reproduce on the previous page the averages, and give a fresh selection of prices obtained, for individual parcels during the week ending February 13, 1926. We understand, however, from another source that during the ensuing week a rather larger supply of South India tea was auctioned; and that, while the best qualities remained firm, common to medium types showed a decline of $\frac{1}{4}d.$ to $\frac{1}{2}d.$ The London bonded stocks on January 31 were 209,655,000 lbs. as against 222,704,000 lbs. on January 31, 1925, and 181,615,000 lbs. on January 31, 1924.

(2) *Rubber.*—During the period under review the stocks dropped by 452 tons to 9,113 tons. The market continued to decline; and 'spot' was done on Tuesday, February 23 at 2s. 3d. which is the lowest price since May 1925; during which month it will be remembered rubber rose from about 1s. 9d. to 3s. per pound. The continued fall during the week was partly attributable to the liquidation of a large 'bull' account.

(3) *Coffee.*—Practically all the coffee auctioned was East African: Kenya predominating, with Tanganaykan and Ugandan a poor second and third. The quality was indifferent, but sold fairly satisfactorily; as low priced coffee is scarce on the Home market, and competition therefor consequently keen. The East Indian offerings consisted of 64 bags from one Nilgiri Estate which were sold, and 212 bags from Coorg of which 63 were withdrawn and 149 sold at the rather disappointing price shown on the previous page.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including, Saturday, March 13, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	2.08	93.97	96.05	19. Coonoor ...	0.30	92.31	92.61
2. *Tenmalai.	4.98	103.51	108.49	20. Kotagiri ...	1.53	71.55	73.08
3. Mundakayam.	0.29	156.84	157.13	21. Ootacamund	0.16	53.19	53.35
4. *Peermade.	1.86	173.79	175.65	22. Yercaud ...	2.75	55.60	58.35
5. Twyford ...	0.19	202.53	202.72	23. Devala ...	N. R.	N. R.	N. R.
6. V'periyar ...	1.89	81.67	83.56	24. Gudalur ...	0.18	74.65	74.83
7. Kalaar ...	1.12	212.46	213.58	25. CALICUT ...	2.05	134.54	136.59
8. Chittuvurrai	0.65	64.35	65.00	26. Kuttiyadi ...	0.07	179.50	179.57
9. BODI'KANUR	0.55	28.27	28.82	27. Vayittiri ...	...	160.49	160.49
10. COCHIN ...	0.73	111.78	112.51	28. Manantoddi.	...	111.56	111.56
11. *Mooply ...	...	116.48	116.48	29. Billigiris ...	1.42	69.19	70.61
12. MooplyValley	...	127.11	127.11	30. *Sidapur ...	...	74.44	74.44
13. Pachaimalai	0.80	124.05	124.85	31. Pollibetta ...	...	85.83	85.83
14. Mudis ...	1.50	203.49	204.99	32. Somwarpett	N. R.	86.19	N. R.
15. POLLACHIE.	0.67	30.18	30.85	33. Ballupete ...	N. R.	N. R.	N. R.
16. Manjeri ...	...	126.58	126.58	34. MANGALORE.	...	139.40	139.40
17. Nilambur ...	...	101.43	101.43	35. MADRAS ...	...	63.35	63.35
18. Naduvattam	0.04	84.32	84.36				

W = During the week.

P = Previously. N. R. No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 13] SAT., MARCH 27, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	203	Mr. Gerald Kingsley ...	212
Tea Planting in Ceylon ...	205	Plant Diseases in Ceylon ...	215
Cardamoms and Pepper ...	207	Commercial and Meteorolo-	
Wynaad P. A. Meetings ...	210	gical ...	219

EDITORIAL NOTES

We are asked to announce that the 33rd Annual General Meeting of the U.P.A.S.I. will be held at Bangalore on Monday, the 23rd of August, 1926 and on the three following days.

The Secretary, U.P.A.S.I., has kindly furnished us with the following figures of the South India Tea Crop from April 1, 1925 to March 31, 1926. For the first nine months of the period the figures are based on returns of the crops actually harvested and for the remaining three months they are compiled from estimates furnished by the Estates.

SEASON 1925-1926

		lbs.	lbs.
Anamalais ...	Coimbatore District	6,700,960	
Nilgiris ...	Nilgiris do.	5,703,816	
Nilgiri-Wynaad ...	Do. do.	3,721,175	
Wynaad ...	Malabar do.	5,177,041	
Total for Madras Presidency			21,302,992
Coorg ...	...		125,788
Travancore :—			
Central ...	(Peermade District).	10,184,382	
Mundakayam ...	...	718,459	
Kanen Devans ...	...	13,400,281	
South ...	...	3,135,418	27,438,540
Total for Southern India		Pounds	48,867,320

The above includes 333,481 pounds green Tea made in Travancore.

In our issue of January 9 we indicated that Mr. Kunwar Maharaj Singh, C.I.E., I.C.S., who had been deputed by the Government of India to study labour conditions in British Guiana, was in favour of emigration to that Colony being legalized under Section 10 of the Indian Emigration Act VII of 1922 which, it will be remembered, prohibited emigration of Indian Labour to countries other than those which the Governor-General-in-Council by special notification should exempt from the operation of the Act. In accordance with this recommendation; Mr. Bhore and Sir Mahomed Habibullah, the Education Member, submitted to the Legislative Assembly and the Council of State on Monday and Tuesday last respectively a notification setting forth the terms on which the Government of India proposed that the emigration of Indian Labour to British Guiana should be resumed. Both Houses passed the notification without alteration of any kind. The salient points in the conditions appear to be that the number of emigrants should be limited to 500 families comprising 1,500 individuals (it is not quite clear whether these figures represent an annual quota or whether they are to be binding until a further notification is issued. *Ed.*); and that each family shall be given a holding of at least five acres of suitable agricultural land at the lowest prevailing rent and shall become absolutely owners thereof at the expiry of seven years; provided they have within that period brought at least half its area under cultivation, and paid a sum not exceeding \$ 24 in the aggregate for certain prescribed fees. The emigrants on these holdings shall be at liberty to take up outside work for wages to be established by Boards of Arbitration on which Indians will be given an adequate number of seats. The Government of British Guiana undertake to bear one-half, three-quarters and the full cost of repatriating emigrants of respectively three to five, five to seven, and over seven years' residence: the cost in each case being assessed at the amount expended in the first instance on bringing the emigrants to British Guiana from their Indian Homes.

On page 170 of our issue of the 13th instant we had occasion to comment on the apparent discrepancy between two statements in the 1924-25 Season and Crop Report of the Madras Presidency which stated respectively that the Exports of Tea had increased and that the Exports of Tea had decreased. The Director of Agriculture, Mr. R. D. Anstead, M.A., kindly informs us that the first statement to the effect that the Export of Tea had increased referred to the value of the Exports; whereas in the other statement the quantity of the Exports was meant. Mr. Anstead proceeds to give the actual figures which we reproduce below:—

	Agricultural Year	
	1923-24	1924-25
Value of Tea Exports in lakhs of Rupees	286.69	301.03
Quantity of Tea Exports in millions of pounds	38.56	37.72

The average value in 1924-25 was 12 as. 9 p. a pound as against 11 as. 10 p. in the previous year.

We regret that a few of the Cross Word Puzzle clues were incorrectly given on page 197 last week. In 13 down 'Border' *Corrigenda* should be 'Order' and in 14 down 'Absolute' should be 'Obsolete.' Please note also that 32 and 33 down were [inadvertently run together: 32 down should be 'Twisted'; and 33 down should be 'One who collects Birds' eggs.'

TEA PLANTING IN CEYLON

This Book ¹ furnishes a most instructive supplement, or perhaps rather corollary, to Mr. Claud Bald's ² *Indian Tea*. Primarily of course it is concerned with the Tea Industry in Ceylon, whereas Mr. Bald's Book is based mainly on the conditions obtaining in Assam. The Books together should prove especially informative to Planters and those interested in Planting in either Assam or Ceylon; for it is now generally recognized—as indeed has recently been exemplified by the deputation of three representatives of the Ceylon Tea Industry to North India—that each country has much to gain by a comparative study of the methods which the other employs. This comment is in no way intended to discount the value of the books for South Indian Planters in particular or for those interested in Tea in general; many of whom already possess *Indian Tea* with admitted benefit to themselves, and all of whom would, we are confident, be well repaid for the comparatively small outlay necessary to secure *Tea Planting in Ceylon*.

One Book, as we have said, supplements the other: to take but two examples; Roads and Drains which receive but five pages in *Tea Planting in Ceylon* are given twenty pages in *Indian Tea*, and *vice versa* Electricity which is disposed off in nine lines by Mr. Bald obtains a Twelve Page Chapter in the Ceylon Book. Incidentally we wonder if Mr. Bald's rather casual treatment of Electricity can be taken as internal evidence that his book was written at least a decade ago and before the use of Electric Power was much in vogue; or whether it is merely attributable to the fact that in Assam Oil Engines and Gas Plants are still widely employed owing to the scarcity of remunerative sources of water supply. If the former is the true explanation, it may account also for the discrepancies in certain estimates as given in the two books. For instance the capital cost of 'Permanent Buildings and Machinery' is given as Rs. 100 per acre on Page 354 of *Indian Tea*, whereas the corresponding figure on Page 24 of *Tea Planting Ceylon* is Rs. 375 to Rs. 450 and indeed Rs. 535 to Rs. 650 if Staff Quarters and Cooly Lines are taken into account. The difference seems greater than can be accounted for by local price variations or by the fact that the Assam Estates are generally larger than those in Ceylon and perhaps therefore have smaller overhead charges on Factories and Machinery and even on Bungalows and Lines. It seems probable therefore that Bald's figures were compiled before prices had soared to post-war levels, and if so they probably also contemplated machinery and buildings of a lower standard than that which is considered adequate to-day.

Tea Planting in Ceylon abounds in invaluable information and hints. Limitations of space preclude us from referring to more than one example; and, if, as we expect our readers prove as avid as Oliver Twist in asking for more, they will, unlike him, be able to satisfy their wants—by ordering a copy of the Book for themselves. The example we select for comment is the explanation and reproduction (pp. 82–84) of Dr. Geehens's simple but

¹ *Tea Planting in Ceylon* by E. C. Elliott and F. J. Whitehead, First Edition, 1926. The Times of Ceylon Co., Ltd :—Rs. 20-8-0 Post Free—Also obtainable from Messrs. Higginbothams Ltd., Madras.

² *Indian Tea* by Claud Bald, Fourth Edition, 192? Thacker Spink & Co., Calcutta and Simla—Price not given.

invaluable Fertilizer Chart which indicates by an octagonal diagram—whose corners are joined together by thick, double, and single lines—which of the eight main classes of fertilizers should never be mixed before using, which can be mixed but only immediately before using, and which can be mixed together at any time without fear of deterioration or loss of valuable plant food. Corner No. 1 (representing Superphosphate) for instance is connected by a thick line with Corner No. 2 (representing Lime) and thus vividly draws attention to the fact that Lime should not be admixed with Superphosphate; because Superphosphate is a substance in which mineral phosphates have been rendered soluble by H_2SO_4 , and the addition of Lime would cause these phosphates to revert to the insoluble form and thus very considerably reduce the value of the manure. Similarly Corner No. 4 (Sulphate of Ammonia) is also connected by a thick line with Corner No. 2 (Lime) because the mixture of these two substances results in the Sulphate of Ammonia losing its valuable constituent, Ammonia, which escapes as gas into the air.

We regret that we have no space for comment on several specially valuable chapters in the Book, and can only select for particular mention No. 6 with its up-to-date summary of the proved remedies for diseases and pests; No. 8 with its 60 pages of detailed information regarding manufacture in all its aspects from harvesting to consumption; No. 9 with its lucid plans and estimates for Factories, Bungalows, and Cooly Lines; and No. 10 with its comprehensive account of the various necessary engines and machines. The last-mentioned chapter might perhaps have been beneficially supplemented by a few 'close-up' photographs of rollers and dryers such as *Indian Tea* contains.

Otherwise the series of twenty-two illustrations seems admirably to elucidate the text of the Book. In it are included a few coloured reproductions which, though perhaps more valuable from an aesthetic than from a severely practical standpoint, will give strangers to Ceylon a very fair idea of the uniquely fascinating scenery which is typical of the Tea Districts of that isle.

We think that the value of the Book might have been slightly enhanced had the joint Authors seem fit to give their credentials on the title page. Doubtless they are men with long practical experience of planting; but the lay reader has perforce to judge technical writings by the *locus standi* of the authors and not by the intrinsic merit of the work. Doubtless however most of the readers of this book—not being laymen—will be in the happy position of being able to deduce from its contents that the writers are thoroughly *au fait* with every aspect of the Tea industry in Ceylon.

Finally we would say that the Book is a credit not only to its Authors but also to its Publishers who have produced a work of, we suppose, over a hundred thousand words in most pleasingly clear type and singularly (indeed so far as we have seen entirely) free from the annoying textual aberrations to which Printers' Devils are so prone. The pages of Columnar Statistics have been especially well set up; and wherever (e.g. Page 146) conducive to clarity inks of two colours have been used,

CARDAMOMS AND PEPPER

Mr. Hugh Fraser Macmillan, F.L.S., E.R.H.S.; formerly Superintendent of the Royal Botanical Gardens, Peradeniya, Ceylon; contributes to the January and February Numbers of the *Tea and Coffee Trade Journal* an interesting article on 'The Spices of Commerce' and the portions relating to Cardamoms and Pepper are reproduced below:—

CARDAMOMS; 'ENSAL' OR 'ENASAL,' S; 'ALAKA' OR 'CARDAMUNGU,' T

(*Elettaria Cardamomum*; *Scitamineæ*). A perennial with large leafy shoots, 10 to 15 feet long, and strong creeping rootstock (rhizomes), native of the moist forests of Ceylon and southern India up to 4,000 feet. In cultivation it thrives best at 2,500 to 3,500 feet, under natural shade, preferring a moist, sloping jungle which has been mostly cleared of undergrowth. Protection from strong winds is essential, and trees must be planted for this purpose where the original trees are deficient.

The spice consists of the ovoid fruit capsules, borne on racemes three to four and one-half feet long; these contain numerous small, brown seeds, and have a strong aromatic odor and flavor. The capsules are gathered before they are fully ripe, washed free of sand, etc., and then placed in large, light trays supported on trestles, on which they are slowly dried and bleached in the sun. The use of such trays facilitates the removal of the crop indoors at night or when a shower of rain threatens. In order to produce even bleaching and prevent deep wrinkles or furrows in the capsules, as produced by rapid drying, watering the latter at intervals of a few hours and turning them over is resorted to. In dull weather the process of bleaching may be assisted by placing the trays with the capsules for about an hour each day for about three days, over the fumes of burning sulphur. This takes place in a hermetically closed case or compartment, at the bottom of which the sulphur is set alight and left to smoke. Two pounds of sulphur are thus sufficient to bleach 100 pounds of cardamoms, which must later be exposed to the sun for a few hours.

When well bleached the capsules should be creamy white, smooth, and silky. They vary in size and shape, from one-half to three-quarters of an inch long, and from oblong to ovoid; they are graded accordingly, the grades being known as 'longs', 'mediums', 'shorts', and 'greens', the last grade including shriveled and insufficiently ripened fruits, and is the most inferior. They are then packed in lead-lined chests for export.

The foregoing remarks regarding bleaching and grading were more applicable a few years ago than now. At the present time most of the cardamoms exported from India and Ceylon are dried green, not bleached, in specially constructed and heated houses, the capsules being spread on hessian tatts or screens, similar to those used for tea leaf, or merely spread upon the floor. This latter method not only saves labor, especially during wet weather, but also crop, for a considerable percentage of the latter is lost in the process of bleaching, which, moreover, is merely superficial and does not materially affect the quality of the spice.

Cardamoms are a powerful aromatic and are used chiefly in medicine, liqueurs, and beverages, and as an ingredient in curry powders, etc. They

are also used in confectionery, and are a reputed aphrodisiac. The small brownish seeds, which are the essential part of the spice, are much esteemed for use with masticatories or for sweetening the breath, and sugar-coated cardamoms are much used at Hindu festivals and ceremonials.

Propagation is by division of the crowns (rhizomes), or by sowing seed, which take two to three months to germinate, in well-prepared nursery beds. In planting out, three to four rhizomes are placed in each hole or clump, the latter being spaced about 10 feet each way. In good soil a small crop may be obtained in the second year from planting, and from the fourth or fifth year an average yield of 250 pounds an acre may be procured, according to cultivation, nature of the soil, etc. The plants are in bearing all the year round, but chiefly during the dry periods, February to March (principal crop season) and August to September, the crop being gathered once every fortnight or three weeks. The fruits should be cut with small, pointed scissors, not pulled by hand, and gathered when three-quarters ripe; if left to ripen fully, they are likely to split open and disperse the seeds.

Prices fluctuate, according to demand, from about 3s. to 5s. or more a pound in London. At the present time the local price in Ceylon is about Rs. 2.50 to 3.25 a pound according to quality. One pound of fresh fruits contains 800 capsules of average size, each of the latter containing 15 to 17 seeds; 10 pounds of fresh capsules produce $2\frac{1}{2}$ pounds of seed. About 50,000 seeds go to a pound. The chief country of consumption is America. Germany was a large consumer before the World War. The export of cardamoms from Ceylon has decreased from 821,184 pounds valued at Rs. 797,818 in 1909, to 312,256 pounds valued at Rs. 563,995 in 1923. It is estimated that there are 7,000 acres under cultivated cardamoms in Ceylon.

Varieties.—Two distinct varieties found in cultivation are known by the names 'Mysore' and 'Malabar.' The former is distinguished by erect or arching racemes, which bear the flowers and fruit, and by the leaves being glabrous on both sides; while in the Malabar the racemes trail on or near the ground, and the leaves are softly pubescent on the under side. The former variety is therefore preferred for cultivation, as the fruits are not so likely to get damaged or soiled as those of the trailing variety. 'Nepal,' 'Bengal,' 'Java,' 'wild or bastard' (of Siam), are forms of cardamoms derived from various species of *Amomum*, which are of local importance only. The Ceylon 'wild cardamom' bears the largest capsules, which sometimes attain $1\frac{1}{2}$ inches in length.

PEPPER; GAMMIRIS, S; MOLAVU, T.

(*Piper nigrum*; *Piperaceæ*). A creeping perennial vine, indigenous to the most low-country forests of Ceylon, South India, and Malaya. Both black and white peppers are obtained from the same plant. The berries (pepper corns), which are borne on a spike three to five inches long, are of a reddish color picked and spread in the sun; they then become black and shriveled. These, when ground with the outer covering left on, form black pepper; deprived of the black covering (first by soaking in water for seven or eight days, then rubbed or macerated with the feet or otherwise), white pepper is obtained. A decorticating machine is sometimes used for the latter purpose.

The pepper vine requires moist heat with shade, and thrives up to 2,500 feet above sea-level. Artificial or natural supports, in the form of posts or trees, are necessary ; the latter being preferable and more durable. *Erythrina*, mango, jak, kapok, and other quick-growing trees are suitable like supports, while they also provide a beneficial light shade. In Sumatra and Malaya, tall posts or trellises of some hard and durable wood are often used for supports. Propagation is best by cuttings, which should be selected from the ends of the best bearing vines. These may be either started in a nursery bed, or planted out where they are to remain. A small crop may be expected in the third year from planting, but the vines will not be in full bearing till the sixth or seventh year. In India, Malaya, and Ceylon, the main crop is produced usually from March to May, and a smaller crop in August or September.

With good cultivation, an annual yield of 2,000 pounds or more per acre should be obtained, allowing for the plants (' stools ') to be planted seven by seven feet, say 880 to the acre. The most economical method of cultivation is to grow the vines on trees which are used as shade along roadsides or for other crops, as ' dadaps ' in tea or cocoa, the cultivation in this case costing but little. Pepper plants will continue to yield good crops for 25 to 30 years.

The trade price of ' black pepper ' in London ranges from 8*d.* to 10*d.* a pound, ' white pepper ' usually bringing 2*d.* to 3*d.* a pound more. The chief sources of supply are the Straits, Java, Sumatra, and Malabar. Ceylon exported 3,653 cwt. of pepper in 1923, valued at £7,800.

Cayenne pepper is made by drying and grinding into fine powder the smaller and most pungent kind of chillies, the fruits of species of *Capsicum*, especially *C. frutescens* and *C. minimum*. The cayenne pepper of shops, however, is said to be usually adulterated with flour or other powders.

Long pepper consists of the unripe fruiting spikes of *Piper longum*, dried in the sun. The plant is a native of India and Ceylon, and is cultivated in parts of India. Long pepper is used chiefly in medicine, being less pungent than *P. nigrum*.

Japan pepper (*Xanthoxylon piperitum* ; *Xanthoxylaceæ*) is a deciduous tree of Japan, the black aromatic pungent fruits which resemble pepper corns and are used as a spice in Japan.

Ashantee pepper (*Piper Clusii* ; *Piperaceæ*) is a handsome pepper vine of west tropical Africa, where the corns of which are used as a spice. These were at one time exported to Europe for use as pepper. The plant is not cultivated.

Negro, Ethiopian, or West African pepper (*Xylopia aromatica* ; *Anonaceæ*) is a tall shrub, native of western Africa, producing clusters of podlike fruits, about two inches long. These are aromatic and pungent, and are used in West Africa in a dried state as a spice.

The small pungent berries of the pepper tree (*Schinus molle*) are sometimes used as pepper.

DISTRICT ASSOCIATION MEETINGS

WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Meppadi Club,
on Wednesday, February 10, 1926, at 2-30 p.m.

Present

Mr. B. M. Behr (*Chairman*), Messrs. J. E. Bisset, E. E. Eyre, W. A. Reynolds, R. A. Leslie, H. J. C. Hammond, R. W. M. Hay, E. Janzen, T. P. Gauld and J. A. Gwynne, (*Acting Honorary Secretary*).

Notice calling the meeting was read.

The following Resolution to amend the Articles of Association was proposed from the Chair:—

'That to Article 8 of the Articles of Association be added the clauses.

(a) In the event of a member selling an estate or a portion of an estate in respect of which he has been admitted to membership of the Association, if the purchaser of such estate or portion thereof shall apply to the Association for admission to membership, then and in such case the member so selling shall be entitled, as from the date on which the said purchaser applies for admission to membership, either to retire if his whole estate is sold, or if he still retains an estate or portion of an estate to remain a member but with a liability to pay such reduced subscription as may be due in respect of such estate or portion of an estate so retained by him, but he shall be released from liability to pay any subscription in respect of the estate or portion of an estate so sold by him as from the date on which the purchaser applies for admission to membership.

Provided always that if such purchaser shall not apply for admission to membership of the Association, the member so selling shall continue to be liable to pay subscriptions until after his expiration of six Calendar months' notice in writing of his intention to retire. Such notice may be given at any time to the Secretary.

(b) In the event of the death of a member his legal representatives shall be entitled to give three Calendar months' notice at any time in writing to the Secretary terminating their liability to pay all further subscription to the Association after the expiration of the said notice.

Any member other than a personal member desirous of retiring as at March 31, 1924, shall give notice in writing of his intention to the Secretary not later than March 31, 1923. After March 31, 1923, any member desirous of retiring shall give one year's notice in manner aforesaid, such notice to expire only at the end of a current financial year of the Association.'

This resolution was passed unanimously.

With a vote of thanks to the Chair the Meeting terminated.

J. A. GWYNNE,

Honorary Secretary.

B. M. BEHR,

Chairman.

WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Meppadi Club
on Wednesday, March 10, 1926, at 2-30 p.m.

Present

Mr. B. M. Behr (*Chairman*), Messrs. J. A. Gwynne (by proxy), J. E. Bisset, W. G. Craig, J. Strachan, E. Janzen and I. W. Finlayson (*Honorary Secretary*).

Notice calling the meeting was read.

1. *Articles of Association*.—The extraordinary resolution amending Article 8 of the Articles of Association passed at the extraordinary General Meeting held on February 10, 1926, was unanimously confirmed as a special resolution.

IAN W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

WYNAAD PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Meppadi Club,
on Wednesday, March 10, 1926, at 3-15 p.m.

Present

Mr. B. M. Behr (*Chairman*), Messrs. J. A. Gwynne, (by proxy), J. E. Bisset, W. G. Craig, J. Strachan, E. Janzen and I. W. Finlayson (*Honorary Secretary*).

Notice calling the meeting was read.

The proceedings of the last meeting were confirmed.

1. *Roads. Nellakotta-Sultan's Battery Road*.—The District Board Engineer's reply to the Chairman was read; in which it was stated that the work estimated for the current year had been practically completed and the necessary repairs to bridges and culverts would be attended to next year as far as funds permitted.

The Honorary Secretary was instructed to send a copy of the District Board Engineer's letter to the Nilgiri-Wynaad Planters' Association.

Chundale-Sholady Road.—A letter from the District Board Engineer to the Chairman stated that instructions regarding the stacking of metal had been issued to the District Board Overseer at Vayitri.

2. *Plague*.—The Chairman informed the meeting that he had had an interview with the Collector of Malabar who had said he was doing all in his power to help us in this matter.

3. *General Committee Meeting of the U.P.A.S.I., held at Ootacamund on February 23, 1926*. The Chairman as delegate informed the meeting regarding the various matters brought up.

4. *Combined Control Committee Meeting held at Ootacamund on February 24, 1926*.—The Control Committee member for Mangalore gave the meeting information as to the matters brought up.

5. *Labour*.—Read letter from the Coorg Planters' Association regarding rules for absconding coolies.

Labour Department, Indian Employees' Provident Fund.—Read letter from the Director of the Labour Department and placed the rules of the Indian Employees' Provident Fund before the meeting.

The meeting was in favour of the scheme and approved the rules.

6. *Auditor*.—The Honorary Secretary informed the meeting of the death of Mr. W. G. Siromani, who was appointed as Auditor to the Association last year. The accounts had been audited by Mr. N. C. Rajagopal, who appeared to have taken over Mr. Siromani's business. The Honorary Secretary was instructed to write Mr. Rajagopal offering him the appointment of Auditor to the Association and arrange what audit fee was to be paid.

The meeting then terminated with a vote of thanks to the Chair.

IAN W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

MR. GERALD KINGSLEY
CHAIRMAN OF THE INDIAN TEA ASSOCIATION

(TWO APPRECIATIONS)

Having run through—on paper—six good men and true in connection with the oil-palm industry in West Africa, we now hope, with the assistance of the East, to call attention to six of the several dozen men who have done and are still doing so much to make the British plantation tea industry over there the success that it has become both in India and Ceylon.

Last month, having done with oil (palm-oil, that is, not what the Americans know as banana-oil) we hopped over to New York and introduced a cacao trader in the shape of Mr. Frank J. Barrett, whilst getting our breath to tackle the East where the men who count do so much and talk so little, and decline to say anything concerning themselves at all.

However, beginning with the Chairman of the Indian Tea Association in London, there are some points that we ask no one to tell us about, for we know them without being told, as for instance, that Mr. Gerald Kingsley is, to-day, Chairman of the aforesaid Association in succession to Mr. W. A. Duncan, who gave up the reins at the forty-fifth Annual Meeting of the Association last July, for his successor to handle and take charge of the team. It is a team that pulls very well together and has, by doing so, made itself a force in the world of production and commerce and also, we would claim, in social and economic politics, for what house could get on if Indian tea fell off the surface of the earth, and what Chancellor of the Exchequer could square his Budget if there were no Indian tea to tax.

Here is a sum for mathematical scholars to work out if they have some knowledge of politics, and know the taxation of tea year by year. A school-boy might be able to get the answer before he goes into the Exchequer; whether any paid servant of the Crown could do so, we do not pretend to say. If India produced 6,844,352,213 lb. of tea from 1900 (when the Boer war was on) to 1923 inclusive, of which, all but 12 per cent seems to have come to the United Kingdom, how much revenue has the Exchequer at Westminster to thank the planters of India for, and especially those who, being members of the India Tea Association, have done so much to help produce this mountain of tea to pour wealth into the Government's Money Chest on the one hand, and to form a refreshing drink that cheers many, if not every one, on the other?

The success of Indian tea did not come unaided. One can hardly say when looking back, that success always appeared to come willingly, but come it had to, and did, thanks to the same propelling power that has been behind the industry since the Assam Company, formed in 1839, first threw down the gauntlet of competition to China. If you doubt this ability to push trade which we claim is common to both the tea and rubber planters in London, ask anyone who is following India's present efforts to push her teas throughout the United States, in France, and, like the truly wise men of the East that they are, in India itself, to tell you what work is being put into this campaign, what sacrifices made, and money spent now that, thanks to better prices, it is there to spend on such a useful purpose instead of being frittered away. What a different policy do we have here in this forward campaign in contrast to what some (non-tea) planters have always done when the sum of prosperity has shone on them and then grizzled when the clouds of hard times rolled up, but would not roll by, and they had no money left to weather the storm.

One would like to say that between the years 1920 and 1930 it is probable that at least £750,000 will have been spent through the channels of the Indian Tea Association to further the interests of the industry generally, and in doing so, benefit the revenue both of India and of this country at the same time. Truly the motto of such men is 'We hold what we have and we seek to secure what new channels of trade can be captured'; an excellent example which we commend to the notice of cacao planters, an industry which as an international whole is quite as wealthy as the Indian tea planters and which being more spread over the earth in many countries, is therefore better able to bear the strain and lower the cost per head of a campaign when they have the foresight and the 'bone' in them to make a similar effort.

Here is the annual allocation of the Indian Tea Cess Fund for 1925 to 1926 showing the total amounts subscribed, about 16 lakhs (a lakh of rupees = 100,000 Rs.; a rupee is now worth 1s. 6d. or say, roughly, 13 to the £, whilst at 1s. 4d. 15 go to the £) and how it is proposed to lay out the amount: (a) A sum of Rs. 4½ lakhs on advertising Indian tea in India, so that, in this case, it is meant that 'a prophet shall have honour in his own country.' (b) A sum of £15,000 to be expended on advertising Indian tea in France. (c) A sum of £40,000 to be expended on advertising Indian tea in the U.S.A. (d) Rs. 75,000 to be set aside to form the nucleus of a reserve or working capital fund.

The propaganda in America is proving a great success through this expenditure; and if the progress in France is not too rapid it is still a 'Sure Winner'.

And this is the Kingdom and its Exchequer over which 'our Friend' is ruling for a year. If the Super-Kingdom that levies toll and tributed from the India Tea Industry could only be persuaded to spend its thousands of million sterling every year with as little waste (including the cost incurred in spending so much money) and obtain as much good, or even say fifty per cent of the benefit the Indian tea campaign shows year by year, then truly would we all be able to sing 'Oh, what a happy land is England'.

But then one has to remember that he who rules over the Indian Tea Association knows the work from A to Z. He needs no equivalent of the House of Commons to tell him what to do, and so be bothered with each member asking for something different 'Our Friend' has a mind of his own; as a tea planter in Assam, he has learnt to know exactly what is necessary without standing upon public platforms or in the market places everywhere, asking others to tell him what he ought to do and how to do it. We remember him as a partner in Messrs. Shaw Wallace & Co., of Calcutta, and as being Chairman of the Indian Tea Association in Calcutta for 1907-08, and again from 1912-14. Then he came to London, and as a partner in Messrs. R. G. Shaw & Co., is still helping us to swell the revenue and run the Empire from this side. Long may we have his help, it has always been well worth having, so one would feel sorry to lose it.

Tropical Life.

Gerald Kingsley, Chairman of the Indian Tea Association, London, is making his first visit to eastern United States in April. He sails with Sir Charles Higham, director of publicity for India tea, on the Leviathan from Southampton, March 30, arriving in New York April 4 or 5.

Mr. Kingsley's stay in America will be a short one. He will be in New York for a week, and then pay a flying visit to Philadelphia, Boston, Detroit, and elsewhere.

Mr. Kingsley was born in 1867 at Bowden, Cheshire, and is the son of the late John Kingsley, B.A., T.C.D. Educated privately, he subsequently went to King William's College, Isle of Man.

After leaving school, Mr. Kingsley, like many another adventure-loving lad, felt the call of the sea, and for a time took up the profession of sailor. He was but 16 years old when he started upon his first voyage, which took him round the world. It was an experience calculated to broaden and develop the lad's mind, for the ship, a sailing vessel, made long stays in many remote parts of the world, and altogether the voyage lasted two years.

At school Mr. Kingsley was a keen cricketer and was also very fond of fives and football. In after years he played in India for the Calcutta Football Club, a Rugby organization, and in that memorable match, the Calcutta Football Club *v.* Buffs, played in 1889, he was one of the winning team.

It was in 1887 that Mr. Kingsley left the sea and took up tea planting in Assam. During the 26 years he spent in India he took a keen interest in all kinds of sport. He went in with enthusiasm for big-game shooting and fishing, and also played polo, tennis, and cricket. During his shooting expeditions Mr. Kingsley shot all kinds of big game, and had the good fortune to know intimately such well-known Assam sportsmen as the late Col. Lumsden, C. B.; Tom Briscoe, Major Sir George A. Dolby, and many others.

Mr. Kingsley is a keen billiard player, and although not a three-figure-break man, his best run being 79, he was when in practice a consistent and fast scorer. During his residence at Barrackpore, near Calcutta, he played matches at the Barrackpore Club against John Roberts, Inman, and Stevenson.

Mr. Kingsley was in Assam for 11 years. For one season he was captain of the Jorehat Polo Club. In Assam he started to play golf, and he and half a dozen of his friends formed a club, which is still flourishing, and made the links when the game was almost unknown in that region.

Mr. Kingsley is largely interested in business concerns in the East. He joined the firm of Shaw Wallace & Co. of Calcutta, Bombay, Madras, Karachi, and Colombo in 1897. He is also Chairman of the Indian Tea Cess Committee.

He left India in December, 1913, on eight months' leave. Owing to the sudden death of one of the partners of R. G. Shaw & Co. of London, in May, 1914, Mr. Kingsley joined this firm, while still retaining his interest in the East. R. G. Shaw Co. are London representatives of Shaw Wallace Co. Mr. Kingsley is now a partner of both firms, and is also a director of the following companies:—

Assam Frontier Tea Co. (managing director); Budla Beta Tea Co.; Bua Dooars Tea Co. (chairman); Dennistown Rubber Estates (chairman); Bukit Ijek Rubber Co. (chairman); Dima Tea Co. (chairman); Merlimau Rubber Estates; F. C. Strick & Co., Busra (chairman); Iraq Produce Co.; Surmah Valloy Tea Co. (chairman); Luskerpore Tea Co. (chairman); India General Steam Navigation Co.; Venesta, Ltd.; Consolidated Eastern Plantations (chairman); Chaiguia Rubber Plantations (chairman).

During the war Mr. Kingsley served on many committees connected with the Food Controller's Department, which dealt with the importation and distribution of tea in England. He is a member of the Royal Calcutta Turf, the Oriental, the Conservative, the City of London, and the Royal Automobile Clubs. He resides at Ashlyn's Hall Berkhamsted, Herts.

PLANT DISEASES IN CEYLON

The following are extracts from the Seventy-second Annual Report of the Planters' Association of Ceylon :—

Plant Diseases

The following notes on plant diseases have been furnished by Dr. C. H. Gædd, Acting Mycologist :—

HEVEA

There was an abnormal fall of young Hevea leaves this year caused by a species of *Oidium*, which attacked the young expanding leaflets when the trees were coming into leaf again after wintering. This disease, which has received the name 'Hevea mildew,' had not previously occurred in Ceylon though it has been reported from Java. A short description of the symptoms of this disease is being published in the Department of Agriculture Year Book for 1926. It appears very probable that though this species of *Oidium* was formerly unknown on Hevea in Ceylon it is not a new introduction, but it is widely distributed through the rubber districts probably on some common weed. The unusually wet weather in the early part of this year possibly assisted the fungus to adapt itself to a new host, and was an important factor favouring the occurrence of this disease. If so, given normally climatic conditions at the time of production of new leaves next year it is not expected that the disease will recur to any serious extent. But as the fungus belongs to a genus which contains a number of very serious diseases, a careful watch should be kept for the recurrence of this mildew on Hevea.

TEA

The leaf disease caused by *Cerosporella theae* resulted in the loss of a large amount of flush on several estates in the Nuwara Eliya District. This disease occurs during monsoon weather on estates where Acacias are grown as wind-belts, and it is from the Acacias that the disease spreads. Acacias are highly valued in Up-country districts as wind-belts and for green manuring, and consequently the Department of Agriculture has hesitated to condemn these trees solely because of this disease. The damage on several Up-country estates this year was very considerable, and the disease is likely to recur whenever weather conditions are favourable. Consequently, it may be necessary on some estates to consider seriously the advisability of replacing the Acacias by other suitable trees. In any case further planting of Acacias cannot be recommended where *Cerosporella* is prevalent.

The large branch cankers of tea and the consequent rotting of the main wood of the frame have attracted considerable attention on many estates. The small cankers caused by *Macrophoma theicola* on young wood must be regarded as being quite distinct from the large cankers on the frame. The latter are most frequently caused by the entry of wood rotting organisms into the heart wood exposed on pruning cuts, though any exposed wood surface, such as that laid bare by the fungus *Macrophoma* or even by Shothole Borers, may form a suitable starting point for the wood rotting fungi. The regular tarring of pruning cuts may prove an efficient preventive. Excision of the affected branches is the most satisfactory method treatment. Experiments are being carried out on several estates to test the efficacy of various coverings or stoppings in preventing further decay. Such treatment will depend to a large extent upon the thoroughness with which the old wounds are cleaned out before the stopping is applied.

The fungus *Macrophoma theicola* which causes cankers on young wood has been found 'capable of infecting tea leaves. Successful artificial infections have been obtained only when the leaves have first been wounded, though naturally infected leaves have been found in the field. It is not feared that this fungus will give rise to a serious form of leaf disease.

GREEN MANURES, ETC.

A disease of *Vigna* caused by *Rhizoctonia solani* is prevalent on many estates on which this plant is grown as a cover crop. This disease is most noticeable during wet weather, and the *Vigna* appears to recover when climatic conditions become drier. This fungus causes serious disease on most seedlings, so that should it become necessary at some later time to raise plants from seed on areas on which the disease now exists, considerable difficulty may be experienced. The same disease occurs in Ceylon on Ground-nuts (*Arachis hypogea*) on which the perfect stage (*Corticumbagum*) has been found, potato and lima beans. In December, the same fungus (*Rhizoctonia solani*) was reported on paddy in some of the new plots on the Anuradhapura Experiment Station.

Mr. Park has carried out investigations on a disease of *Dadaps* caused by a species of *Fusarium* and a description of this disease is being published in the Year Book of the Department of Agriculture, 1926.

A defoliation of *Albizias* was reported from the Dickoya District towards the end of September. Both pollarded and non-pollarded trees were affected, but the disease was less marked in sheltered hollows. A similar case of defoliation was reported from the Maskeliya District in May, but in this case unlopped trees were mainly attacked, only old leaves of lopped trees being affected. Affected leaves were spotted, but the fungus associated with the spots could not be identified nor isolated. There was no evidence of the disease having passed to the tea.

Insect Pests

The following notes on insect pests have been furnished by Dr. J. C. Hutson, Entomologist:—

TEA

The Shot-hole Borer investigations have been concluded by the Assistant Entomologist, and the final results have been published in bulletin No. 72 entitled 'The Control of Shot-hole Borer of Tea,' by F. P. Jepson and C. H. Gadd.

Termites (*Calotermes* spp.) are now being investigated by the Assistant Entomologist, but it is too early yet to give any definite results. A survey of the effected areas in the Dimbula and Maskeliya districts is to be made by the Assistant Entomologist early in 1926.

Tea Tortrix (*Homona coffearia*) continues to be prevalent on some estates in the Dimbula and Maskeliya districts. A survey of the affected areas is to be made by the Entomologist and Assistant Entomologist during the early part of 1926.

Outbreaks of the following caterpillars have been reported during the year. Bagworm (*Clania variegata*), Red Slug (*Heterusia cingala*), Fringed nettle-grub (*Natada nararia*), and Lobster caterpillar (*Saturopus alternus*).

Green Bug (*Coccus viridis*) and Brown Bug (*Saissetia hemispherica*) were prevalent on some estates near Haputale and Bandarawela towards the end of the year under review, and circular letter with a list of questions was addressed to several estates in these districts. A visit is to be paid to the affected areas by an Entomologist early in 1926.

RUBBER

The following termites have been found in diseased rubber stems in the Southern Province :—*Calotermes dilatatus*, *Glyptotermes ceylonicus*, and *Eutermes* spp. The *Calotermes* were invading the healthier tissues.

GREEN MANURE AND SHADE TREES

Outbreaks of the Spotted Locust (*Anlarches miliaris*) have occurred during the year on some estates in village gardens. Dadap is the favourite food plant of this pest on estates, and in village mixed cultivations such plants as cocoanut, arecanut, jak, breadfruit and plantain are attacked. Small local outbreaks should be controlled immediately by collecting and destroying the young hoppers in March and April and the adults from July to November. An article on this locust is being published in the Year Book of the Department of Agriculture for 1926.

The Tussock caterpillar (*Notolophus psoticus*) is sometimes prevalent on dadap. An article on this pest is appearing in the Year Book for 1926.

Crotalaria has been attacked by various caterpillars during the year among which may be mentioned (*Argina...argus*). *A. syringa* and *Uletheisa pulchella* feeding on the leaves and boring into the pods.

Albizzia trees have been defoliated by the caterpillars of the yellow butterfly (*Terias silhetana*) on some estates.

The leaves and shoots of Gliricidia have occasionally been attacked by the Green Bug (*Coccus viridis*) and a mealy bug (*Pseudococcus* sp.) usually accompanied by the sooty mould fungus which gives the leaves a blackened appearance.

Indigofera endecaphylla has been defoliated by the small caterpillars of *Dichomeris ianthes*.

MISCELLANEOUS

HOUSE FLIES AND MANURE.—During the first half of the year the problem of house flies and manure has been investigated by the Assistant Entomologist and the results of the investigations are being published in Bulletin No. 74, 'House Flies and their Connection with Manuring Operations on Estates in Ceylon.'

Plant Pest and Disease Inspection

The following notes on the work of Plant Pest Inspection have been supplied by Messrs. N. K. Jardine and C. N. E. J. de Mel, Plant Pest Inspectors :—

CENTRAL DIVISION

This year, as in last year, more attention has been given to village cultivations than to estates. This Division has methodically carried out educational propaganda along the lines of improvement of agriculture and agricultural methods of plant sanitation for the control of pests and diseases, throughout the villages of the Central Province. That the interest of the villager is being steadily aroused and centred round the value of sound agricultural practice is evident in the general improvement of village crops, and the rapidity with which local outbreaks of pests and diseases are brought to the attention of the Division.

39,314 acres have been inspected during the year ; this includes 98 estates, 4,084 gardens and 79 tea nurseries.

The lectures to meetings of small cultivators, which were so successful last year, were considerably extended during the period under review. In place of all-day lectures at the towns of Kandy, Matale and Kegalle half-day lectures were substituted and were given at nine villages central to the large areas under village cultivations. As in the previous year these

lectures were delivered in Sinhalese and were illustrated by specimens of pests and diseases, posters, and illustrated leaflets in the vernaculars.

The number of permits for the removal of tea plants was 357, totaling 4,020,253 plants. This is an excess of 1,265,137 on last year. It is pleasing to learn that prosecutions for sale of plants without permits during the year are very considerably less than those of last year. This points to a comprehension on the part of the villager of the regulations governing the removal of plants, and tends definitely to reduce the dissemination of Shot-hole Borer.

From a review of the records procured by this Division during inspections, it is considered that village cultivations have been freer of pests and diseases this year than during last year. There is no doubt that there is a general movement towards better cultivation and plant sanitation throughout the villages of the Central Province.

SHOT-HOLE BORER has not spread this year. The Division possesses no records of any fresh infestation.

TEA TORTRIX has been no worse this year than in previous years.

SPOTTED LOCUST (*Aularches miliaris*) has warranted anxiety. The insect has spread considerably, and has occurred in several places where it was unsuspected. This insect is particularly suited to development in village cultivations, and it is considered that unless a careful record is kept of sporadic outbreaks and the breeding grounds of the insect it may become a menace to the more important crops of the Province.

TEA TERMITE (*Calotermes militaris*) also warrants serious consideration. It would appear that this insect is more prevalent in the tea of estates than of village lands, but of its seriousness there is little doubt.

Southern Division

TEA

Three cases of Shot-hole Borer have been reported: 2 from Deniyaya District, 1 from Akuresse in Weligam Korale. While almost all the common pests and diseases of tea have been found during inspections, those worth mentioning are as follows:—

Tea Termites on 8 estates.

Tea Tortrix on 3 estates.

Poria on 5 estates.

Brown and Grey Blights on 10 estates.

Ustulina on 4 estates.

Red Borer on 5 estates.

Branch Canker on 4 estates.

Diplodia Root disease on 4 estates.

Diplodia, Ustulina and Poria are the common root diseases. Termites are doing considerable damage on a few estates.

RUBBER

Canker is prevalent and Brown Bast is frequent:—

Canker was found on 34 estates.

Black thread (Bark Rot) on 10 estates.

Ustulina Zonata, the chief root disease, was reported on 12 estates.

Diplodia on 13 estates.

Brown Bast on 24 estates.

Fomes on 2 estates.

Abnormal leaf fall on 1 estate.

Except Canker and Brown Bast, the other diseases mentioned occurred only on a few trees on each estate.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending March 20th, 1926

Bank Selling Demand Draft on London

15th	16th	17th	18th	19th	20th
Holiday.	18 3/32d.	18 1/16d.	18 1/32d.	17 31/32d.	17 31/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending February 20, 1926	January 1 to February 20, 1926	January 1 to February 20, 1925
A. TEA (WEEK ENDING FEBRUARY 20, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 10.52	1 9.16	1 7.80
			S. India	**1 10.86	††1 9.63	††1 7.09
			Ceylon...	1 10.56	1 10.22	1 8.79
			Java ...	1 6.30	1 5.65	1 3.09
Karakundru ...	102	1 11½	Sumatra.	Nil.	1 7.74	1 6.45
Sholayar ...	117	1 11	Nyassa-land.	Nil.	1 6.47	1 4.74
Pachaimallai ...	92	1 11	Total ...	*1 10.26	†1 9.29	†1 7.55
Kallyar ...	177	1 10¾				
Selaliparai ...	87	1 10¼				
(b) Central Travancore.			(b) COFFEE			
Glenmary ...	50	1 10½	SPECIAL CABLE, LONDON, MARCH 24, 1926			
Cheenthalaar ...	147	1 9	'A' QUALITY 144s. MARKET STEADY			
Injimullay ...	105	1 9	London Prices (seven days ending March 2, 1926)			
(c) Kanen Devans—				bgs.	s. d.	grades.
Letchmi ...	146	2 2	Coorg—			
Yellapatti ...	63	2 1	Wudderhully.	67	134 3	1,2, PB & T.
Chockanad ...	116	2 0½	Hallery ...	74	125 2	Do.
Periavurrai ...	178	2 0¼	Do. ...	61	125 1	1,2,3, PB & T.
			Mysore—			
			Mysore XQ ...	50	147 11	1,2, PB & T.
			Honeyvale ...	58	146 7	1,2,3, PB & T.
			Olivers ...	56	146 1	Do.
			Nilgiri—			
			Adderley ...	26	14 11	Extra, 3, P B & T.
			Munjoor ...	52	134 1	Extra, 1,2,3, PB & T.
			(c) RUBBER			
			The London quotation for Plantation first Latex Crepe on Monday, March 22, 1926, was 30½d.			

** Based on 1,820 packages.

†† " " 32,935 "

†† " " 31,034 "

* Based on 68,962 packages.

† " " 544,908 "

† " " 431,356 "

(d) *Précis of reports on the London Market received on Monday, March 22, and covering the seven days ending Tuesday, March 2:—*

(1) *Tea.* This week, as last, the London Tea Brokers' Report from which we take our tea prices remains a week in arrears; and consequently the prices quoted on the previous page do not cover any of the period dealt with in this short review. However, we learn from other sources that the quantity of South Indian Tea on offer from February 24th to March 2nd inclusive was comparatively small, and that the market remained firm as far as common teas are concerned and showed an increase in the case of Medium to Good. Nilgiri Estates are reported to have done exceptionally well: the 'Prospect' average for instance being 2s. 2 $\frac{3}{4}$ d. a pound.

(2) *Rubber.* During the period under review the stocks increased by 694 tons to 9,807 tons; and the 'spot' price, after slumping from the 2s. 3d. which we quoted last week down to 2s. 1 $\frac{3}{4}$ d. recovered sharply up to as much as 2s. 5 $\frac{1}{2}$ d. and then fell again to 2s. 3 $\frac{1}{2}$ d.; thus closing at $\frac{1}{2}$ d. above the closing price which we reported for the previous week.

(3) *Coffee.* A fair proportion of the Mysore and Coorg Coffee offered found buyers at average prices appreciably higher than those which were obtained during the previous week. Some of the highest prices are given on the previous page, as are also the figures obtained by the two Nilgiri Estates which had Coffee for sale. During 1925 imports into the U. S. A. declined by nearly 1 $\frac{1}{4}$ million cwts. to 11,460,700 cwts.; although the value of the imports increased by over \$37,000,000. The per caput consumption in the U.S.A. was 11.09 lbs., against 12.3 lbs. in 1924 and 12.4 lbs. in 1923.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including, Saturday, March 20, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	0.25	96.05	96.30	19. Coonoor ...	0.10	92.61	92.71
2. *Tenmalai.	0.02	108.49	108.51	20. Kotagiri ...	N. R.	73.08	N. R.
3. Mundakayam.	1.86	157.13	158.99	21. Ootacamund	0.98	53.35	54.33
4. *Peermade.	1.01	175.65	176.66	22. Yercaud ...	1.71	58.35	60.06
5. Twyford ...	N. R.	202.72	N. R.	23. Devala ...	N. R.	132.24	N. R.
6. V'periyar ...	...	83.56	83.56	24. Gudalur ...	0.02	74.83	74.85
7. Kalaar ...	1.32	213.58	214.90	25. CALICUT ...	...	136.59	136.59
8. Chittuvurrai	0.50	65.00	65.50	26. Kuttiyadi ...	...	179.57	179.57
9. BODI'KANUR	0.22	28.82	29.04	27. Vayittiri ...	...	160.49	160.49
10. COCHIN ...	0.01	112.51	112.52	28. Manantoddi.	0.02	111.56	111.58
11. *Mooply ...	0.07	116.48	116.55	29. Billigiris ...	0.71	70.61	71.32
12. MooplyValley	0.09	127.11	127.20	30. *Sidapur ...	...	74.44	74.44
13. Pachaimalai	0.01	124.85	124.86	31. Pollibetta...	...	85.83	85.83
14. Mudis ...	N. R.	204.99	N. R.	32. Somwarpett	...	86.19	86.19
15. POLLACHIE.	...	30.85	30.85	33. Ballupete ...	...	76.24	76.24
16. Manjeri ...	...	126.58	126.58	34. MANGALORE.	...	139.40	139.40
17. Nilambur ...	...	101.43	101.43	35. MADRAS ...	...	63.35	63.35
18. Naduvattam	0.27	84.36	84.63				

W = During the week.

P = Previously. N. R. No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 14]

SAT., APRIL 3, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	221	India's Trade, 1924-25 ...	227
Rubber Growers' Association		The Early History of Rubber...	231
(South Indian Branch) ...	222	Exports of Coffee, Rubber and	
The Rubber Prospect ...	223	Tea ...	234
The Coffee Berry Borer ...	225	Commercial and Meteorolo-	
		gical ...	235

EDITORIAL NOTES

The Ceylon Planters' Benevolent Fund. At the recent Annual General Meeting of Subscribers to the Ceylon Planters' Benevolent Fund, the Chairman, Major Oldfield, was able to announce that, as the result of a special appeal made last year, over £16,000 had been received in subscriptions from London Directorates in addition to a sum of Rs. 40,000 from Local Firms. As a consequence, the Balance Sheet was an unprecedentedly satisfactory document: the Income for the year exceeding Expenditure by over Rs. 2,50,000 and the Capital on December 31 being no less than Rs. 6,08,000 as against Rs. 3,46,000 on the corresponding date of 1924. The Ceylon Planting Community is to be most heartily congratulated on the splendid results of its 'Beat-Up'; and we hope that the Directors and Shareholders of many South Indian Companies will emulate the example of their Ceylon colleagues; and see to it that the handsome donation, which we had the pleasure of announcing in our Editorial Notes three weeks ago, will prove but the first of a long series of generous contributions to the U.P.A.S.I. Benevolent Fund.

To Clean Black Silk The following Persian method of cleaning black silk is said to give excellent results. The silk is brushed thoroughly, wiped with a cloth, spread flat on a board or table, and well sponged with hot coffee (thoroughly strained free from sediment) on the side intended to show. When partly dried the silk is ironed on the reverse side. It is claimed that the Coffee removes every particle of grease, and restores permanently the original brilliancy of the silk; without either imparting a 'shiny' appearance, or causing undue stiffness or 'cracks'. We propose making some experiments as soon as we

can acquire a cast-off black silk garment; but in the meantime of course we cannot guarantee that the alleged remedy would not prove worse than the disease.

The Earl Winterton, Under-Secretary of State for India, in answering Mr. A. V. Alexander in the House of Commons on February 25th stated that he hoped the Royal Commission on Agriculture would commence work this Autumn; but that it was impossible at present to make any statement regarding its personnel.

The Agricultural Commission
In the Madras Legislative Council on the 23rd ultimo the Hon. the Rajah of Panagal, Minister for Local Self-Government, informed Mr. A. Ranganatha Moodelliar that the Local and Municipal and Public Health Advisory Committees in joint meeting on May 18, 1925, had suggested that the levy of tolls on Motor Vehicles should be superseded by the imposition of an annual tax. The matter would, he continued, be referred back to these Advisory Committees as soon as the Government had obtained full statistics of the probable amount which the abolition of the tolls would involve.

Toll Gates
The Hon. Rao Bahadur Sir A. P. Patro, Minister for Education and Public Works, replying to Mr. C. V. Venkatramana Ayyangar in the Madras Legislative Council on the 26th ultimo, stated that orders have been passed that the recently opened sub-gates at the intersection of the Anamalai-Pulankinar and the Pollachi-Vannanthorai roads were to be removed at once. The local officers, he admitted, had acted *ultra vires* in levying tolls on the cross-traffic utilizing the former road.

Vannanthorai-Pollachi Road
Sir Charles Innes, answering Sir Darcy Lindsay in the Legislative Assembly of the 22nd ultimo, said he understood that the fact that the Ceylon Government admitted Javan Tea Seed under Government Certificate while it absolutely prohibited the importation of Indian Tea seed had recently been brought to the notice of the Indian Tea Association; which would doubtless in due course make the necessary representations if it considered that Government intervention was required. Sir Charles added that Java had received 65 tons of the 121 tons of tea seed which had been exported from India during the last two years.

THE RUBBER GROWERS' ASSOCIATION

SOUTH INDIAN BRANCH

Notice

In connection with the Meeting called for 10th April at Cochin the Chairman asks me to circulate notice suggesting that no discussion should be admitted unless a resolution is brought forward.

It is hoped therefore that Members will before the commencement of the Meeting hand the Secretary written copies of any resolutions they may desire to propose. This practice is the customary procedure at business meetings; and its observance (subject of course to such modifications as the exigencies of business may require) should prevent discussion becoming discursive and unduly prolonged.

H. WADDINGTON,
Secretary.

March 29, 1926.

THE RUBBER PROSPECT

Jesting Pilate, implies Bacon, would not have the Truth even though he could. Those interested in the future of Rubber, on the other hand, cannot have the Truth even though they most certainly would. On their behalf, it is true, authoritative prophets are doing their best to pierce the veil. But unfortunately their best—though most creditable relatively—is very inadequate absolutely for those who seek reliable indications of what is going to happen in the Rubber World during the remainder of the current year. Notwithstanding ; all such will feel most grateful to the Experts who have so perseveringly undertaken the thankless job of calculating the relative importance of each separate factor which may affect the situation ; and of estimating (an even more difficult task) exactly how their interplay is likely to react upon price.

Leaving aside, as of remote probability and therefore of minor importance, the possibility of some epoch-making discovery in the fields of Synthetic Research or cheap Aerial Transport ; we find that the two factors which dominate the position are (1) Demand ; and (2) Supply—both potentially as conditioned by the acreage in bearing and actually as determined by the Restriction Scheme.

We imagine that most of the estimates are based on the assumption that restriction on output in any shape or form will terminate on the 30th of this month ; so if, as seems quite possible, the restriction machinery is not scrapped but is retained at any rate in some modified form, the actual available amount of the commodity will have been over-estimated in certain instances ; since we must assume that in the case of not a few estates the potential production is very appreciably greater than 100 per cent of the production certified as Standard under the Restriction Scheme. Any such modifications of the estimates, however, will have a beneficial tendency on the price ; and perhaps it is wiser for our purpose to ignore such adventitious contingencies unless they would, if realized, be prejudicial in their effect. Also it must be remembered, there are other estates which could not produce 100 per cent of the ' Standard ' yield.

The highest and the lowest of the several estimates of the 1926 production, which we summarized on Page 2 of our issue of January 2, were respectively 630,000 tons and 555,604 tons (Mr. A. W. Still) ; and the higher figure which is that of the Crude Rubber and Foreign Produce Corporation of New York has since been more or less endorsed by other accepted authorities such as Messrs. Symington and Sinclair and Messrs. S. Figgis & Co., who quote respectively 626,000 and 628,000 tons ; Messrs. Lewis and Peat, Ltd., who estimate the Malayan, Dutch East Indies, Ceylon and ' Other ' Production at respectively 285,000 ; 210,000 ; 65,000 ; and 70,000 tons ; and Messrs. E. A. Barbour, Ltd., whose corresponding figures are 285,000 ; 195,000 ; 60,000 ; and 80,000 tons. Incidentally it may be noted that none of these four estimates contemplates that either Malaya and Ceylon as a whole will yield the full Standard Production which, we understand, is placed at 315,000 tons in the case of Malaya and 68,640 tons in the case of Ceylon. In January, of course, the exportable quota was only 85 per cent.

The estimate of approximately 630,000 tons therefore is certainly backed by a weighty concensus ; but, even so, it has to be accepted with a certain amount of reserve. Space precludes us from doing more than merely indicating for example the diffidence which must attend any computation of the native Dutch East Indian acreage or of its average acreage yield ; and in this connection it may be noted that Dr. A. A. L. Rutgers,

the Director of Agriculture to the Dutch Indies Government, maintains that by 1930 the output will be at least double the 73,000 tons produced in 1925, and exceed by no less than 120,000 tons the figure given by Mr. Figart on Page 298 of his *The Plantation Rubber Industry in the Middle East*. Dr. Rutgers, however, maintains that Mr. Figart's figures have already been vitiated: citing for example his estimate on the same page that the native Dutch East Indian output for 1925 would only be 36,000 tons whereas in actuality that figure was exceeded by the exports of the first half-year alone. Mr. Figart's figures indeed are questioned by other authorities who point out that the basis of his estimate of the potential production of Malaya was the 1921 census report which was published in 1923, and which gave the F. M. S. acreage under Rubber as a 1,235,051 acres; as against the 1,024,655 acres, returned by a 1924 census and published in the F. M. S. *Government Gazette* of February 26, 1926. It would therefore appear that in the F. M. S. alone there are no less than 210,000 fewer acres in Rubber than Mr. Figart supposed. There is a possibility, however, that this exaggeration of the F. M. S. Rubber acreage may be to some extent counteracted by a corresponding under-estimate of the Rubber acreage in the Strait Settlements and the U. F. M. S. Here again, however, the miscalculation will have only resulted in more conservative estimates of the prices which the future is likely to see. Finally, before, we leave the question of production we must emphasize that *pari passu* with the relaxation of restriction it becomes increasingly difficult to estimate output; since such vagaries as are incidental to bad weather conditions and shortages of labour could be safely discounted so long as exports were limited to a figure very considerably below the potential crop.

The estimates of consumption vary almost as widely as those of Production; but perhaps we will be fairly safe in taking the figure of 603,000 tons which Messrs. Symington and Sinclair have arrived at after an extremely exhaustive analysis of the probable requirements of the U.S.A. Tyre Trade in 1926. That Firm estimates that 264,500 tons and 78,000 tons respectively will be required for the manufacture of 65,700,000 motor tyres and 88,000,000 motor tubes, making a total of 342,500 tons; which with another 27,500 tons for Solid tyres, Bicycle tyres, and Sundries makes the grand total for the American tyre trade up to 370,000 tons. 45,000 tons are allowed for other sections of the Rubber Industry in the U.S.A.; and the consumption for that country is therefore placed at 415,000 tons. Messrs. Symington and Sinclair estimate that Germany and Austria will account for 45,000 tons, France for 37,500 tons, United Kingdom for 33,000 tons, Canada for 20,000 tons, Japan for 15,000 tons, Italy and Russia for 12,000 tons each and other countries for 13,500 tons: making the world consumption 603,000 tons. Here again, however, there are several apparently undeterminable factors—we find, to quote but one example, Messrs. S. Figgis & Co. stating that America will use 120,000 tons of reclaimed rubber against 70,000 tons in 1925 while Messrs. E. A. Barbour, Ltd., give as corresponding figures 210,000 tons and 140,000 tons.

In the result, we feel fairly confident that during 1926 production is not likely to exceed consumption by more than 630,000 minus 603,000 tons or say 27,000 tons; and it is quite within the range of possibility that the excess may not be nearly so great. Bearing in mind the fact that it would require an excess of some 80,000 tons to bring the total Stocks up to the minimum figure which both producers and consumers agree is necessary to prevent undue fluctuations in the industry, and that large forward contracts have already been made at remunerative prices for this

and next year; and further remembering that practically all authorities predict severe shortage round about 1929; we feel strongly—and would continue to feel even if the price of 'spot' rubber fell to and remained for a time at the so-called 'pivotal' price of 1s. 6d.—that there is no reason for undue alarm about the future, that the industry *recule pour mieux sauter*, and that the check which the very sharp December-February decline received last month may be taken as a happy omen and even a sure indication of prosperous days ahead. Indeed if we were less impecunious we should be probably spending at present quite an appreciable portion of our time in studying the hand books which give the Capital, Acreage, Areas planted and in bearing, Cost of Production, and the Cash Assets of the various estates; with a view to selecting a few which—judging not only or even chiefly by low capitalization but rather by high production per £1 of capital employed—would furnish a profitable repository for our surplus cash.

THE COFFEE BERRY BORER

(Translated from the *Review of the Brazilian Rural Society*)

With the notable campaign recently started for the protection of the coffee plantations contaminated by a new pest, the State Government has come forward at the right moment to render valuable assistance to the planting industry by supplying it with the support and influence that it so badly requires. And together with this benefit of much moral, economical and financial value it also brought along other advantages of a material, practical and scientific order, all of which help is, without distinction, worthy of the highest praise from whatever standpoint we choose to look at it.

With the intention of ridding the coffee industry, the source of our greatest wealth, for the time being from all difficulties, the public authorities have put forward their best efforts, and have succeeded in obtaining, although their task is only half way through, the most satisfactory results which are causing those best able to judge to feel complete or, at least, much greater confidence for the future of coffee, their chief industry.

We wish to refer, especially, to the insect whose name appears at the head of the notes, and about which we propose to speak within the limits of our knowledge, guided by the data supplied to us by technical science.

The insect which drills holes into the coffee berries is commonly called *broca* and scientifically called *Stephanoderes coffea* Hag., but which the majority of the planters have erroneously confused with the *caruncho das tulhas* (*Araecerus fasciculatus*, De Geer) or wood-worm, which is found in the timber of the coffee sheds. It, however, is of a quite a different species. The *caruncho tulhas* has always existed in Brazil ever since the development of the coffee cultivation industry. Although it also attacks the coffee berry and other seeds, it does not produce any great damage nor does it affect the natural flavour of the coffee berry; whereas the insect which we call *broca*, a kind of bore-worm, and which has only recently made its appearance in our country, in addition to greatly altering the flavour of the coffee itself, through that brings about a substantial drop in the price of the latter. The wood-worm, *caruncho das tulhas*, although it damages a part of the grain, does so without spoiling the flavour as it leaves it still serviceable, in spite of

its being broken, for roasting purposes. The *broca*, on the contrary, by almost completely spoiling the grain, renders it unserviceable, for that purpose. (In both cases the coffee cannot surely be good enough to ship.—ED., T.L.)

If we examine the coffee berries that have been attacked by the two insects, the differences are at once very apparent. The hole drilled by the *caruncho* is made from the outside—outwards and that made by the *broca* from outside—inwards. The coffee berries, even when they are 'chumbinhos' (leadish), on being attacked by the *broca*, wither and fall. The *verdes* (green ones), whilst still juicy, also wither and fall when attacked. The *brocas* do not bore their galleries for the purpose of hatching their eggs in the seeds until the latter have commenced to harden. In the *chumbinhos*, *verdes*, *verdoengos* (greenish), *cerejas* (cherry ones) and *melosos*, the *broca* rarely bores its hole, unless it be in the crown, which is the tenderest part of the fruit, and for that reason, is preferred. Holes, however, are to be found in other parts, such as in the sides, at the end, and even in the branches of the coffee plant.

The pods that fall to the ground serve as a nest for the *brocas*, which are more prolific in the month of December. At the bottom of the galleries which they make in the hardened seeds, or in the dry pods, where there is a certain dampness, they lay their eggs from which there arise small larvæ which, in proportion to their growth, attain first the stage of nymphas (chrysalis) and then become *brocas*, which is their complete development. The females come out already pregnant from the fruits in which they were reared in order to look for other fruits under proper conditions where they can go and lay their eggs. Each seed can suffice to rear from two to three larvæ of the *caruncho* which makes its appearance, causing damage to the damp coffee heaped up in the sheds. The seeds that are attacked in this way lose in weight naturally, but the quality, the aroma and the flavour, are not affected. It is an evil, therefore, which can be remedied, but the seeds that have been gnawed by the *broca* and by its larvæ have an ugly appearance, bad smell and a bad flavour.

From observations made it has been discovered that it is only in the coffee seeds that the *broca* will lay its eggs and rear its larvæ until they have attained the stage of nymphas, or chrysalis, and afterwards that of the adult insect, when it then becomes known under the name of *Stephanoderes coffea*, Hag., after the name of the classifier, Hagedorn.

In other seeds, among which are those of the earthnut and the castor-oil plant, in which the *broca* had bored a hole in order to hide, it was seen that this insect had not left its eggs there, preferring the fruit of the coffee plant in which to multiply its species.

The larvæ of the *broca*, under healthy conditions, reaches this stage in eight to twelve days and afterwards passes on to the stage of nymphas, which is the intermediate one of its development, within twenty to thirty days. The nymphas exist in this state for about six to twelve days, according to the conditions surrounding them.

The *broca* has membranous wings and, when not flying, hides under them. The male is much smaller than the female and, having no wings to fly with, remains in the fruit where he was born. Hence in the siftings they are sought for and destroyed within the abandoned fruit, thus preventing the females from becoming fruitful and laying eggs. The females have strong lower jaws with teeth and antennæ.

There are many little beetles of the species of the *Stephanoderes* but all of them differ one from the other either by their antennæ, by their shell and hairs, or by their legs.

The *caruncho das tulhas* is much bigger than the *broca* and is very intelligent. Both male and female can fly quite well. It is to be found in the majority of vegetable refuse without any special preference for coffee. It exists everywhere like the bean *caruncho*, the corn, maize and rice-worm, the pink pest of the cotton seed, and the *quiabo* or parasite of the cotton leaf and of the cabbage. In other words, it is quite a cosmopolitan insect.

The *Stephanoderes seriatus* Eich., is a *broca* which lays its eggs in various places, but not in the coffee. There are many other smaller beetles which very much resemble the coffee *broca*, which bore their holes in pods and other seeds, but all of them differ on being classified.

The larvæ of the fruit-fly, *Ceratitis capitata*, Wied, which develops itself in the pulp of the coffee fruit in its *cerejas* or cherry state, does not affect the seed. It is also very common in oranges, peaches, plums, etc.

The above are the chief differences which are to be noted between the two insects, in the confusion of which a great deal of damage may be caused. The existence of one, namely, the *caruncho*, only appears for a short time in the damp coffee heaps or sheds, and can, therefore, be avoided by measures that are easily and efficaciously applied; that of the other, the *broca*, owing to its habit of rapidly spreading itself over the coffee plantations and remaining there, damaging them on an extensive scale, is causing the greatest anxiety to the Public Authorities and requires and is receiving a very close study in order to successfully and thoroughly exterminate it.

Tropical Life.

REVIEW OF THE TRADE OF INDIA IN 1924-25

The Fifty-first issue of this Annual Compilation of the Department of Commercial Intelligence and Statistics (Calcutta: Government of India Central Publication Branch: Price, Rs. 2 or 3s. 6d.) deals with the period April 1, 1924 to March 31, 1925 and has the following remarks to make about Coffee, Rubber and Tea :—

A. COFFEE

Exports of coffee increased by 11 per cent in quantity and 33 per cent in value from 218,000 cwts. valued at Rs. 1,57 lakhs to 242,000 cwts. valued at Rs. 2,09 lakhs. The coffee crop of the season 1923-24 was estimated at 23 million lbs. on an area of 130,000 acres and there was also a good crop in 1924-25. The Brazilian crop of 1924-25 turned out a failure owing to bad weather experienced during the flowering season. Consequently, in spite of the abundant coffee crop of the previous year there was a shortage in the world's visible coffee supplies which caused a considerable rise in prices and stimulated exports from India. In spite of the rise in prices world consumption continued at a high level. The average declared value per cwt. increased from Rs. 72 in the preceding year to Rs. 86. The United Kingdom was the best customer, as in the preceding year, and took 75,300 cwts. as compared with 73,400 cwts. in 1923-24. The shipments to France also

increased from 63,100 cwts. to 67,700 cwts. and to Germany from 11,500 cwts. to 21,500 cwts. Of the other Continental countries the Netherlands, Belgium and Italy increased their takings while Norway took less. Exports to Mesopotamia increased from 10,300 cwts. to 11,700 cwts. and to the Bahrein Islands from 5,800 cwts. to 10,300 cwts., while Arabia took 1,800 cwts. as compared with 7,900 cwts, in 1923-24. Shipments to Australia also decreased.

B. RUBBER

The area tapped in 1924 was 81,900 acres and the yield was 15½ million lbs. as compared with 73,900 acres and 14½ million lbs. in 1923. Exports of rubber further increased in the year under review by 17 per cent in quantity and by 25 per cent in value and amounted to 18 million lbs. valued at Rs. 1,43 lakhs as compared with 15½ million lbs. valued at Rs. 1,14½ lakhs in the preceding year. General restriction of production and the smallness of available stocks in Europe and America led to a steady demand and rising prices. From July 1924 till the end of the year under review rubber prices advanced steadily. The average declared value of exports per lb. increased from 11 annas 10 pies to 12 annas 8 pies in 1924-25. The United Kingdom increased her demands from 7½ million lbs. to over 8½ million lbs. Her share in the total exports was 48 per cent as in the preceding year. Ceylon took nearly 4 million lbs. or 22 per cent of the total, the Straits Settlements 3½ million lbs. or 19 per cent and the United States 1¾ million lbs. or nearly 10 per cent. Madras had 52 per cent of the trade and Burma 48 per cent

C. TEA

The total production of tea in India was estimated at 375 million lbs. in 1924, as in 1923 and 312 million lbs. in 1922. Assam contributed 63 per cent, Northern India (excluding Assam) 24 per cent and Southern India 13 per cent, as compared with 63, 25, and 12 per cent, respectively in the preceding year. And the total area under tea in India during 1924 was 716,000 acres as compared with 711,000 acres in 1923. The statement below shows the development of the industry during the past 19 years:—

—	1905	1915	1920	1922	1923	1924
Acreage	Acres	Acres	Acres	Acres	Acres	Acres
Assam ...	339,200	382,800	420,200	412,100	411,900	412,900
Rest of Northern India ...	153,500	181,300	193,800	203,200	203,500	204,500
Southern India.	33,800	68,000	88,400	92,900	95,800	98,800
TOTAL ...	526,500	632,100	702,400	708,200	711,200	716,200
Production	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
Assam ...	151,905	245,752	234,314	199,965	237,601	237,153
Rest of Northern India ...	57,478	94,695	75,237	75,126	92,076	91,351
Southern India.	11,910	31,611	35,655	36,548	45,679	46,752
TOTAL ...	221,293	372,058	345,206	311,639	375,356	375,256

Exports during the same years were as follows :—

Exports of tea by sea to foreign countries

—	1905-06	1915-16	1920-21	1922-23	1923-24	1924-25
	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
From Northern India (Calcutta and Chittagong)...	199,737	301,403	250,233	253,796	296,778	299,747
From Southern India (Madras ports) ...	12,680	25,840	30,628	30,386	38,560	37,717
From Bombay, Sind and Burma ...	1,807	11,227	4,881	4,114	3,417	2,643
TOTAL ...	214,224	338,470	285,752	288,296	338,755	340,107

The total exports of tea, during 1924-25 amounted to 340 million lbs. valued at Rs. 33½ crores, as compared with 338¾ million lbs., valued at Rs. 31½ crores in the preceding year. Of this total 879,000 lbs. were green tea as compared with 255,000 lbs. in 1923-24, the rest being black tea. The total quantity of tea shipped rose by less than one-half per cent, while the value showed an increase of over 5 per cent. The United Kingdom took 298 million lbs. of black tea valued at Rs. 29¾ crores as compared with 296 million lbs. valued at Rs. 28 crores in 1923-24. She also took 875,000 lbs. of green tea as compared with only 10,000 lbs. in the preceding year. She had nearly 88 per cent of the total quantity shipped as compared with 87 per cent in 1923-24. The re-exports of Indian tea from the United Kingdom during 1924-25 were 38 million lbs. as in the preceding year, of which 19 million lbs. were shipped to the Irish Free State, 10 million lbs. to the Continent of Europe, 3¾ million lbs. to the United States of America and 2½ million lbs. to Canada. Direct shipments from India to the United States increased slightly from 5,869,000 lbs. to 6,209,000 lbs., while those to Canada fell from nearly 12 million lbs. to 9 million lbs. Australia took 4 million lbs.—almost the same quantity as in the preceding year. The exports to Ceylon showed a small increase and amounted to nearly 4 million lbs. Mesopotamia again reduced her demands from 3½ million lbs. to 2½ million lbs. and Arabia also took less than in 1923-24. Exports to Persia, Egypt and the Union of South Africa increased, while Chile took less. Russia reappeared in the market and took 1½ million lbs. There were no direct exports to Russia during the preceding four years. As in the two preceding years, 88 per cent of the total quantity was exported from Bengal and 11 per cent from Madras.

India's share of the total imports of tea into the United Kingdom in 1924 was 57·6 per cent, as compared with 58·5 per cent in 1923, 61 per cent in 1922 and 54 per cent in the pre-war period. In France India's share was 10·3 per cent about the same as in the preceding year, as compared with 16 per cent both in 1922 and in

the pre-war period. In Canada India had 57 per cent of the total imports of tea, as compared with about 55 per cent in each of the two preceding years and 38 per cent in the pre-war quinquennium. In the case of the United States, India's share improved from 7.3 per cent in 1923 to 11.5 per cent in 1924, as compared with 7.8 per cent in 1922 and 7 per cent, the pre-war average. In Australia India's share decreased from 10 per cent to nearly 9 per cent, while in New Zealand India had 10 per cent of the trade as in the previous year.

There was a vigorous and optimistic advertising campaign in the United States of America and that country's consumption of Indian tea was somewhat greater in the year under review than in either of the preceding years. But it is too early yet to regard this as a stable improvement as at the same time that country markedly reduced her total consumption of tea. Before the war she imported on an average 95 million lbs. Her annual average during the war was 101 millions, in 1922 97 millions, in 1923 105 millions, but in 1924 only 93 millions. India's share of that total improved as already remarked from 7.3 per cent in 1923 to 11.5 per cent in 1924. This advance was at the expense of America's major suppliers Japan, China and Ceylon, but the fall in the total importations does not indicate an increase in the tea-drinking habit, and her consumption of tea per head does not appear to be increasing. The figure for 1924 was estimated at 0.81 of a pound of tea as compared with 0.94 in 1923, and 0.86 in 1922, while, on the other hand, of coffee, the American takes between 12 and 13 lbs. per head per year.

In 1924 the import duty on tea into the United Kingdom was reduced. Foreign-grown teas now pay 4 pence per lb. duty instead of 8 pence per lb. and Empire-grown teas pay 3½ pence per lb. duty instead of 6½ pence per lb. The latter hold a predominant position in the markets of the United Kingdom, but the lessening of their protection was followed by an increase in the importations of Java tea to 57½ million lbs. as compared with 39 millions in 1923 and 1922 and 18 millions before the war. [When comparing current tea figures with those before the war it has to be borne in mind that importations of tea into the United Kingdom have risen from a pre-war average of 349 millions to 512 millions.] At a special meeting of sellers on the Calcutta market held on the 14th November, 1924, a resolution was adopted approving and supporting a decision of the London Tea Association to discontinue forward sales of crops or parts of crops for 1925.

The imports of foreign tea by sea into British India decreased in the year under review from 13 million lbs. valued at Rs. 82 lakhs to nearly 8 million lbs., valued at Rs. 63 lakhs. China supplied over 6 million lbs. or 75 per cent of the total imports as compared with 10 million lbs. in 1923-24. Imports from Ceylon amounted to 646,000 lbs. from the Straits Settlements to 404,000 lbs. and from Java to 369,000 lbs., as compared with 777,000 lbs., 345,000 lbs., 1,047,000 lbs., respectively, in the preceding year.

The quantity of tea waste exported for the manufacture of caffeine increased from 2,296,000 lbs. to 3,240,000 lbs. The United States took 2,631,000 lbs. and the United Kingdom 542,000 lbs.

THE EARLY HISTORY OF THE RUBBER INDUSTRY

Upon examination the history of the rubber industry will be found—said Mr. B. D. Porritt, M.Sc., F.I.C., F.R.S.E., F.I.R.I., in a paper recently read before the Society of Chemical Industry—to fall into five clearly divided sections: (a) the introduction of rubber into Europe; (b) the development of methods for its conversion into useful articles; (c) the discovery of vulcanization; (d) the development of mechanical transport and the solid and pneumatic tyre; and (e) the introduction of *Hevea brasiliensis* into the East.

Any one of these topics would in itself provide the material for a paper, but a brief survey of the outstanding facts and personalities connected with each epoch may possibly convey a clear picture of the birth and development of a great modern industry.

THE INTRODUCTION OF RUBBER INTO EUROPE

Though rubber has undoubtedly been known to the native races of South and Central America for countless generations, the first European to become acquainted with it would seem to have been Christopher Columbus, since the historian Antonio de Herrera states that the explorer, during his second voyage to the New World, between 1493–1496, found the natives of Haiti to be using in their games balls prepared from the gum of a tree. Whatever justification there may be for the assumption that these balls were composed of rubber, it is certain, from references in the books of the period, that the Spanish conquerors when they colonized the mainland speedily became acquainted with the product and the use to which it was applied by the natives.

For instance, it is recorded that in 1615 the Spanish troops in Mexico were using garments waterproofed by treatment with rubber latex to protect themselves from rain.

The surprising fact, however, is that the knowledge of rubber by civilized races should seem to have been delayed until the discovery of America, since rubber-producing plants are widely distributed in nature, and occur not only in South and Central America, but also in Africa and many parts of Asia. That the civilizations of the past were not wanting in enterprise in the search for new products in distant lands is common knowledge, and it is more than likely that rubber came to the notice of the ancient philosophers, though probably more as a curiosity than as a useful material. Such, at least, was the state of affairs in Europe for nearly 250 years following the discovery of America, since the Spanish and Portuguese do not appear to have made more than local use of rubber in their South American settlements. It is to the French that we owe the first attempts to study the properties and sources of the material and the possibilities of importing it for the manufacture of useful articles in Europe.

In the year 1736 the Academie des Sciences sent a scientific expedition to Peru to measure an arc of meridian. At the conclusion of the investigation one member of the party, Charles de la Condamine, left the others in order to undertake the remarkable feat of crossing the continent of South America from Quito to Peru, following the course of the Amazon.

During this adventurous journey Condamine secured samples of rubber, and on his arrival at Para sent these on to Paris with a description

of the tree from which the product was obtained. He further ascertained the methods by which the natives of the Amazon Valley made their water-proof garments, shoes, bottles, etc., by coating fabrics or clay moulds with latex and drying each coat, as applied, over a smoky fire.

Condamine clearly recognized the possibilities of rubber and the difficulties which had to be surmounted before its use could be extended beyond the crudely fashioned articles prepared by the natives from freshly-collected latex.

From the date of his return to France communications began to appear in the scientific journals of the period dealing with experiments made with the object of discovering a satisfactory solvent for the solid rubber, or finding some means of inhibiting the rapid spontaneous coagulation which rendered it impossible to import latex into Europe for manufacturing purposes.

In 1763 Herissant and Macquer suggested the use of turpentine as a solvent, while five years later Macquer found that purified ether gave a more satisfactory result. This was followed in 1791 by the discovery by Fabroni that rectified petroleum dissolved rubber. As a result of these investigations, Grossart, in 1791, succeeded in making tubes of rubber by using strips which were first softened by heating, and thus rendered adhesive by treatment with ether. He, moreover, drew attention to the value of rubber for surgical purposes, and this work probably supplied the inspiration which led to Hancock's subsequent discoveries.

When we remember the state of scientific knowledge in these early days, and the limited number of solvents available, these results appear highly creditable. But the investigations of the period into the properties of latex are even more noteworthy.

In 1790 Fourcroy discovered that coagulation could be prevented by the addition of an alkali, and suggested that preserved latex should be imported into France for manufacturing purposes.

More than a century was to pass before the results of this first investigation into the properties of latex were put into practice, and only during the past five years has latex preserved with ammonia become a commercial product. During the interval Fourcroy's work seems to have been totally overlooked, and we find Hancock and Good-year some forty years later abandoning their attempts to use the natural product owing to the difficulty of securing supplies in an unfermented condition.

This brings us to the end of the eighteenth century by which time the general properties of rubber were known to scientific men throughout Europe. Botanists had studied and described the rubber-producing trees of South America, while Roxburgh and Howison had discovered the occurrence of the *Ficus elastica* in Sumatra and Penang respectively.

The time was clearly ripe for some practical use to be made of a product with such unique properties, and we now pass on to the eventful forty years during which the rapid advance of pure and applied science and the practical discoveries of a few famous men were to lay the foundations of a great industry.

THE DISCOVERY OF METHODS OF MANUFACTURE

Those who desired to obtain a clear picture of the state of knowledge in regard to rubber at the close of the eighteenth century as referred to a remarkable article which appeared in a periodical called the *Bee* towards the end of 1791. In this year the writer not only summarizes all that was known at the time in regard to the product, but indulges in some remarkable speculations regarding the uses which would be found for rubber in

years to come. So accurate was his forecast that there is little which we are able to add to his list to-day.

But the lack of suitable solvents and machinery for the time being stood in the way of the accomplishment of these ideas, and meanwhile the chief employment of rubber was for the purpose of erasing pencil marks, a use suggested in France as early as 1752, and a practice which according to Priestley had been adopted in England by 1770. It is, of course, to this particular application that we owe the origin of the name 'india-rubber.' It would also seem that playing balls with rubber cores were used by the boys in the French schools during this early period and that rubber catheter tubes had already been introduced into surgical practice.

We now come to an event which marks the beginning of a new era in pure and applied chemistry, namely, the first practical use of coal gas for the purpose of illumination in Boulton and Watts' foundry at Soho in the year 1802. This innovation was largely due to William Murdock, one of the firm's engineers, who, when employed at Redruth installing pumping engines in the Cornish tin mines, conceived the idea of lighting his house by gas. The results of this first primitive experiment in the year 1792 are well known.

The new illuminant was rapidly adopted in towns and factories in place of the dirty and inefficient lamps burning colza and other vegetable oils. By 1815 it is recorded that 4,000 Argand gas lamps were in use in London alone, and gas companies were springing up in all the principal towns of England and Scotland. The new industry had naturally many problems to face, amongst which was the disposal of the large quantities of naphtha and tarry by-products for which at the time no technical use existed in a country mainly agricultural in its activities. The difficulty was, however, tackled from a variety of directions, and within a few years the work of Thomas Hancock and Charles Macintosh provided an outlet for the naphtha and brought the rubber proofing industry into being. To illustrate the rapid strides which were made in regard to the disposal of the remaining by-products, it may be noted that the promenade at Margate was tarred as early as 1824, and that a few years later tar was successfully employed for the firing of the retorts in the gaswork at Glasgow and Manchester. We will, however, leave the subject of the gas industry for the moment to consider the work of Thomas Hancock, whose practical discoveries in connection with the manipulation of rubber rendered it possible for full advantage to be taken of the advent of a new solvent.

Hancock was the son of a cabinet maker and timber merchant at Marlborough, in Wiltshire, and the third member of a family of twelve children. Of these no less than three—Thomas, Walter and Charles—have found a place in the Dictionary of National Biography, a remarkable record for a family in a little provincial town. Little is known in regard to the youth of Thomas Hancock, or when he came to London. He seems, however, to have been established in partnership with his brother John as a coach builder about 1815, with a factory in Pulteney Street, Golden Square, and a shop in St. James' Street. The circumstances which attracted Hancock's attention to rubber about the year 1819 are not known, but they were probably connected with its possibilities as a waterproofing agent for the garments of passengers in the days of the stage coach.

(To be continued.)

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING FEBRUARY, 1926									
From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia	
<i>Coffee—</i>									
Madras	387	...	...	60	15	...	...	...	...
Calicut	10	...	131	298	7	...	...	180	...
Mangalore	2,787	...	5,258	4,234	5,206	...	...	2,342	...
Tellicherry	80	...	1,571	1,665	4	...	...	...	...
Bombay	...	...	637	...	209	...	...	...	...
Total	3,264	...	7,597	6,257	5,441	...	...	2,522	...
Previously	2,435	...	13,240	5,888	777	9	...	300	...
Total cwts. since 1-1-26.	5,699	...	20,837	12,145	6,218	9	...	2,822	...
<i>Rubber—</i>									
Calicut	...	78,250	53,599	...	...	...	5,069	...	...
Cochin	...	134,869	382,885	9,740	...	...	128,850	...	...
Mangalore	...	85,971	...	...	...	...	...	...	...
Tuticorin	...	91,759	...	...	...	...	...	...	...
Alleppey	...	172,232	35,450	...	...	...	11,200	...	17,920
Total	...	563,081	471,934	9,740	...	...	145,119	17,920	...
Previously	...	720,385	401,279	30,269	...	...	170,708	...	...
Total lbs. since 1-1-26.	...	1,283,466	873,213	40,009	...	...	315,827	17,920	...
<i>Tea—</i>									
Madras	576	...	131,975	60	534	...	...	100	...
Calicut	64,802	38,193	168,039	...	300	800	...	...	...
Cochin	39,592	14,247	393,347	...	...	...	...	...	...
Tellicherry	315	4,190	9,683	...	...	...	...	...	...
Tuticorin	...	281,820	815,236	...	...	...	...	...	...
Alleppey	...	39,244	22,164	...	...	...	...	...	...
Total	105,285	377,694	1,540,444	60	834	800	...	100	...
Previously	420,721	3,563,597	31,525,452	1,058,741	9,319	7,935	83,828	1,850	...
Total lbs. since 1-4-25.	526,006	3,941,291	33,065,896	1,058,801	10,153	8,735	83,828	1,950	...

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending March 27th, 1926

Bank Selling Demand Draft on London

22nd	23rd	24th	25th	26th	27th
17 31/32d.	17 31/32d.	17 31/32d.	17 31/32d.	17 31/32d.	17 31/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending February 27, 1926	January 1 to February 27, 1926	January 1 to February 27, 1925
A. TEA (WEEK ENDING FEBRUARY 27, 1926)				s. d.	s. d.	s. d.
(a) <i>Anamallais</i> —			N. India.	1 9·99	1 9·26	1 7·67
Selaliparai ...	83	1 11½	S. India	**1 9·86	††1 9·66	††1 7·04
Thonimudi ...	217	1 11¼	Ceylon...	1 10·52	1 10·24	1 8·72
Pannimade ...	53	1 10¼	Java ...	1 6·07	1 5·73	1 2·96
	118	1 9½	Sumatra.	1 6·97	1 7·55	1 6·17
(b) <i>Central Travancore</i> .			Nyassa-land.	1 8·61	1 6·96	1 4·82
Fairfield ...	88	1 10	Total ...	*1 9·59	†1 9·33	1 7·51
Koliekanam ...	144	1 9¾				
Bonami ...	85	1 9½				
Thengakal ...	113	1 9¼				
(c) <i>Coorg</i> —						
Glen Lorna ...	174	1 9½				
(d) <i>Kanen Devans</i> —						
Yellapatty ...	111	2 1				
Letchmi ...	243	1 11½				
Munaar ...	187	1 11½				
Guderal ...	158	1 11¼				
(e) <i>Mundakayam</i> —						
Yendayar ...	228	1 8½				
(f) <i>Niligiris</i> —						
Prospect ...	159	2 2¾				
Craigmore ...	155	1 10				
Woodlands ...	105	1 9¾				
Mailoor ...	111	1 9¼				
(g) <i>Niligiri Wynaad</i> —						
Seaforth ...	80	1 10¾				
Barwood ...	86	1 10¼				
Rousden Mallai ...	89	1 7¾				
(h) <i>South Travancore</i> —						
Poonmudi ...	96	1 9¼				
Braemore ...	80	1 8¾				
(i) <i>Wynaad</i> —						
Chulika ...	88	1 8¾				

(b) COFFEE

SPECIAL CABLE, LONDON, MARCH 31, 1926

'A' QUALITY 144s. MARKET STEADY

London Prices (seven days ending March 9, 1926)

	bgs.	s.	d.	grades.
<i>Coorg</i> —				
I. M. S u n t i-				
coppa ...	34	121	4	1,2,3 PB&T.
Faith ...	41	123	10	1,2 PB & T.
Balayatrie ...	38	124	2	1,2,3 PB&T.
Margoli ...	128	133	3	Do.
<i>Mysore</i> —				
Hegoodloo ...	64	136	6	Do.

N. B.—A defective type holder was last week responsible for the dropping of a '4': the 'Adderley' price consequently appearing as '14s. 11d.' instead of '144s. 11d.'

(c) RUBBER

The 'London 'Spot' quotation for Plantation first Latex Crepe on Monday, March 29, 1926, was 29d.

** Based on 4,715 packages.

†† " " 37,650 "

†† " " 33,796 "

* Based on 78,861 packages.

† " " 623,769 "

† " " 471,087 "

(d) *Precis of reports on the London Market received on Monday, March 29, and covering the seven days ending Tuesday, March 9 :—*

(1) *Tea.* Owing to the London Tea Brokers' Report being still a week behind hand in arrival, we are compelled to compile this précis on the London Market for the seven days ending March 9, from the less detailed report which we receive from another source. Judging from that document, the quantity of South India tea on offer was smaller than in the previous week and demand was well sustained for the best qualities though the common sorts showed a slight falling off in price.

(2) *Rubber.* During the period under review the stocks increased by 691 tons to 10,498 tons; and the 'spot' price opened at 2s. 3½d. and closed at 2s. 4d. though it touched 2s. 5½d. at one period during the seven days. The London stocks, as quoted above, are only about one-half of the figure for the corresponding date last year, and one-sixth of the figure for the year before.

(3) *Coffee.* Only five South Indian Estates had coffee at auction during the period under review and the prices realized are given on the previous page. The London stocks of Indian Coffee on March 10 were 18,630 bags as against 5,207 on the same date last year.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including, Saturday, March 27, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty.	...	96·30	96·30	19. Coonoor ...	...	92·71	...
2. *Tenmalai.	...	108·51	108·51	20. Kotagiri ...	...	...	...
3. Mundakayam.	...	158·99	158·99	21. Ootacamund	...	54·33	...
4. *Peermade.	...	176·66	176·66	22. Yercaud ...	...	60·06	...
5. Twyford	202·72	202·72	23. Devala ...	...	...	...
6. V'periyar	83·56	83·56	24. Gudalur ...	...	74·85	...
7. Kalaar	214·90	214·90	25. CALICUT ...	...	136·59	...
8. Chittuvurrai	...	65·50	65·50	26. Kuttiyadi ...	...	179·57	...
9. BODI'KANUR	...	29·04	...	27. Vayittiri ...	...	160·49	...
10. COCHIN	112·52	...	28. Manantoddi.	...	111·58	...
11. *Mooply ...	0·07	116·55	116·62	29. Billigiris ...	...	71·32	71·32
12. MooplyValley	...	127·20	127·20	30. *Sidapur ...	...	74·44	74·44
13. Pachaimalai	...	124·86	124·86	31. Pollibetta...	...	85·83	85·83
14. Murdis	204·99	204·99	32. Somwarpett	...	86·19	86·19
15. POLLACHIE.	...	30·85	...	33. Ballupete ...	...	76·24	76·12
16. Manjeri	126·58	...	34. MANGALORE.	...	139·40	...
17. Nilambur	101·43	...	35. MADRAS ...	...	63·35	...
18. Naduvattam	...	84·63	...				

W = During the week.

P = Previously. N. R. No return.

* = U.P.A.S.I. Ex. Station.

N.B.—Owing to the Easter Holidays the figures for Nos. 9, 10, 15 to 28 inclusive, and 34 and 35 (being compiled from Government returns received each Friday) have had to be omitted this week.

PLANTERS' 'WEEK', 1926



THE ADULTS

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 15] SAT., APRIL 10, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	237	Letters to the Editor—	
U. P. S. C. Annual General Meeting ...	239	Tea in Coorg ...	247
Synthetic Farmyard Manure ...	241	Grassy Flavour in Coffee ...	248
Early History of the Rubber Industry ...	242	Pilfering ...	248
Tea in East Africa ...	246	Commercial and Meteorological ...	249

EDITORIAL NOTES

With this issue we publish the Rainfall for the week ending April the 3rd, and thus complete the totals for 1925-26. Next week we shall be publishing the Rainfall from the 4th to the 10th instants inclusive which appertain of course to the Rainfall of 1926-27. We take the opportunity of thanking our many correspondents for the great help they have accorded us during the past nine months in keeping the returns fairly well up to date, and we feel sure that we can similarly rely on their co-operation during the forthcoming year. The names of the Scientific Stations Mooply, Peermade, Sidapur and Tenmalai (Nos. 11, 4, 30 and 2) disappear from our statement from next week. Thanks to Mr. Walmesley we have already a substitute for Mooply; and we are in correspondence with Superintendents in the respective neighbourhoods of the other three stations that are being abandoned and consequently hope to preserve some sort of continuity with the records which have been maintained there during the past five years. We presume that the supplies of Rainfall Post Cards, which we note most of our correspondents are still using, will soon be exhausted; and are therefore having a fresh stock of stamped Post Cards printed and hope to send fifty to each of our correspondents within the next few days.

The Annual Report of the Director of Agriculture, Kenya, for the year 1925, which has reached us this week, states that the total acreage under Coffee totalled 65,140 on the 30th June as against 60,054; 52,249; and 43,359 respectively on the same dates in 1924, 1923, and 1922. The following comparative figures show the

stride made by the Coffee Industry in Kenya during the three years ending 30th June, 1925:—

	Acreage planted on 30th June	Analysis of the planted acreage by age			Total crop in cwts. for the 12 months ending 30th June	
		Up to 3 years	3-6 years	Over 6 years	Clean Coffee	Buni.
1922	43,359	20,137	9,474	13,748	47,425	5,540
1925	65,140	26,224	17,713	21,203	104,419	11,111

The Provincial distribution of the 65,140 acres was Kikuyu 37,662 (of which 27,577 came from the Kiambu District); Nyanza 4,093; Ukamba 1,599; Kerio Province 79; Coast Province Nil; while the seven extra-provincial Districts accounted for the balance of 21,707.

The India Office announced on the 31st ultimo, that His Majesty the King-Emperor had approved of the following constitution for the Royal Commission on Agriculture with the terms of reference already recorded on Page 154 of our issue of March 6th:—

The Royal Commission on Agriculture
Chairman: The Most Hon. The Marquess of Linlithgow, D.L.; Members: (1) Mr. Hubert Calvert, C.I.E., M.L.A., I.C.S., Registrar of Co-operative Societies, Punjab; (2) Professor Nogendranath Gangulee, Professor of Agriculture and Rural Economy, Calcutta University; (3) Dr. Lodhi Karim Hyder, M.L.A., Professor of Economics, Aligarh University; (4) Mr. Balkrishna Sitaram Kamat, member of the Bombay Agricultural Board; (5) His Excellency Sir Henry Staveley Lawrence, K.C.S.I., acting Governor of Bombay; (6) Sir James Mackenna, I.C.S., late Development Commissioner, Burma; (7) Sir Thomas Middleton, K.B.E., C.B., Commissioner under the Development and Road Improvement Funding Act; (8) Rajah Sir Krishna Chandra Gajapati Narayana Deo Garu, Rajah of Parlakimedi, Zemindar, Madras Presidency; (9) Rai Bahadur Sir Ganga Ram, C.I.E., M.V.O., late P.W.D.

Tea in Mysore
Our Readers will have noticed from the Prospectus of the Kalasa Tea and Produce Co., Ltd., which was issued with our Paper last week, that some 750 acres in the Kalasa Valley are to be planted up with Tea under the supervision of Col. L. Lachlan Porter, V.D., A.D.C., and Mr. E. W. Fowke of Goominkhan Estate. We now hear that there are other tea ventures afoot in the State. The name of a well-known N. Mysore Planter is mentioned in connection with a project involving some 2,000 acres in the Kalasa District; and Messrs. Brooke Bond and Co., Ltd., are reported to have bought several Coffee Estates in the Balehonnur District for conversion into tea. Other Companies are reported to be undertaking similar enterprises in the Koppa District and in the Bababudins.

Planters' Week, 1926
Thanks to the initiative of Mr. G. W. Fulcher, our issue this week is to be adorned with reproductions of three—the Adults' and Childrens' Fancy Dress Groups, and the Rugger Finalists—of the photographs taken at Ootacamund in February last. The blocks are under preparation by Mr. Willie Burke, and if they furnish reproductions up to the high standard associated with his name they should provide a very pleasant souvenir for those of our Readers who were fortunate enough to get away to Ootacamund for Planters' Week.

U. P. A. S. I. SPORTS CLUB

Proceedings of the Annual General Meeting held on February 23, 1926, at Ootacamund Gymkhana Club.

Present

Mr. J. Stuart Hawkins	...	...	<i>President.</i>
„ B. M. Behr }			
„ D. Cooper }	...	...	<i>Committee Members.</i>
„ H. Waddington	...	...	<i>Treasurer.</i>
„ G. W. Fulcher	...	...	<i>Honorary Secretary.</i>

and the following members :—

Sir Fairless Barber, Capt. Windle, Major Brock, Messrs. H. L. Pinches, H. C. Davies, G. Bayzand, T. Colthurst, A. K. Weld Downing, J. Backhouse, J. S. Symons, E. S. Conner, W. F. Inman, A. P. D. Lodge, J. J. Murphy, G. Gibbon, E. B. Flanagan, H. F. C. Daubeny, R. Fowke, F. W. Winterbotham, A. G. Macgregor, E. E. Ranicar, W. J. Dixon, G. L. Jack, G. A. Holden and W. P. Laird.

Minutes of last meeting were taken as read.

The President addressed the meeting and congratulated all on the large increase in membership and funds of the Club, the former having risen during the past year from 186 to 302 and the cash balance in hand over the same period from Rs. 2,167 to Rs. 5,464. He also thanked the donors of all the new Cups and the Committee members for the help they had given during the past year.

The accounts for the year were on the table.

Subscription Rates.—The matter of rates on salary basis was fully discussed.

The following resolution proposed by Mr. Weld Downing and seconded by Mr. Colthurst was put to the meeting but was not carried :—

‘That the minimum subscription to the Sports Club be fixed at
‘Rs. 10 per annum in place of the present figure of Rs. 5.’

Club Colours.—After some discussion the following resolution and amendments were put to the meeting :—

Proposed by Mr. Weld Downing and seconded by Mr. Backhouse :—

‘That the general colour of blazer be green with the pocket outlined
‘in gold with the initials UPASC in gold.’

Not carried.

Proposed by Mr. Colthurst and seconded by Sir Fairless Barber :—

‘That there shall be no official blazer for the Sports Club but the
‘Club shall use a green and white striped footer jersey.’

Not carried.

Proposed by Mr. Fulcher and seconded by Mr. Behr :—

‘Plain green with UPASC in white on pocket for blazers and plain
‘green with white collars for rugger shirts.’

Carried.

Affiliation.—Proposed by Mr. Weld Downing and seconded by Mr. Backhouse :—

‘ That the Honorary Secretary be asked to ascertain from other
‘ Gymkhana Clubs in Southern India the possibilities of affiliation
‘ with them.’

Not carried.

District Representatives.—The matter of publicity of Club affairs through *The Planters' Chronicle* in districts was brought up. It was discovered that many members of the Club never saw the *Chronicle*. It was the opinion of the meeting that every planter subscribing to a District Association (whether personal member or otherwise) should be supplied with the *Chronicle* weekly.

Membership Rules.—There having occurred cases of members who have allowed their annual subscriptions to lapse, the following resolution proposed by Mr. Behr and seconded by Major Brock was put to the meeting :—

‘ That members who allow their subscriptions to lapse shall on
‘ rejoining the Club pay up all arrears.’

Carried unanimously.

Married Assistants.—For the purpose of being helped with their expenses when attending the annual Meet or when representing the Club in Madras, the following resolution proposed by Mr. Conner and seconded by Mr. Behr was put to the meeting :—

‘ That married planters drawing a salary up to Rs. 600 be allowed
‘ to come under the same heading as unmarried planters drawing
‘ less than Rs. 450.’

Carried.

Election of Office Bearers for 1926-27.—

President : Mr. B. M. Behr.

Committee : Messrs. J. S. Hawkins, D. Cooper, H. H. English and G. W. Fulcher.

Owing to the large amount of work in connection with the Club, the meeting agreed that Mr. W. F. Inman should help Mr. Fulcher as Secretary for the Southern Districts and Mr. T. C. Colthurst as Meet Secretary.

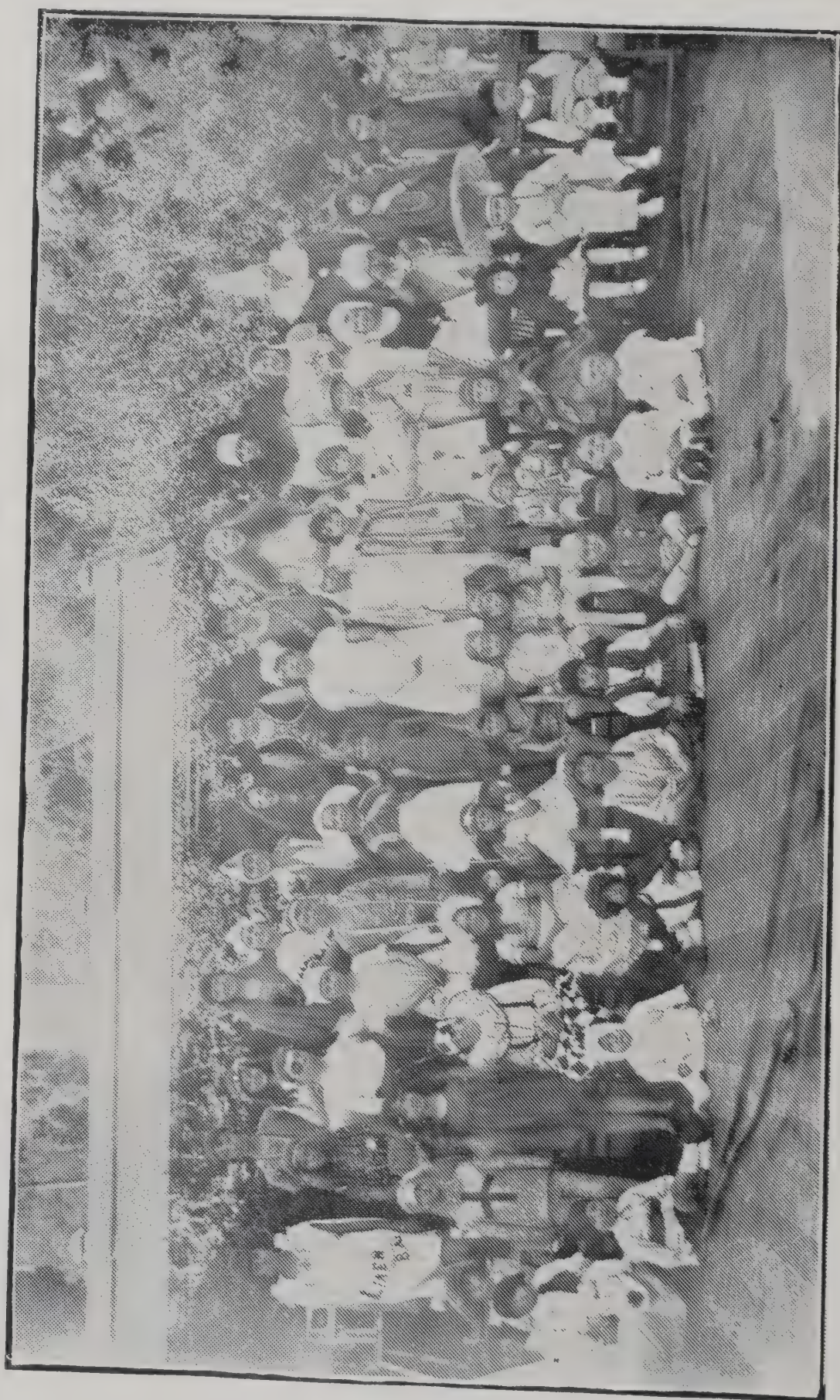
Vote of Thanks.—The members of the Ootacamund Gymkhana Club were thanked for the use of their Club House, Tennis Courts and Golf Course for the Meet.

With a vote of thanks to the Chair the meeting ended.

G. W. FULCHER,
Honorary Secretary.

STUART HAWKINS,
President.

PLANTERS' 'WEEK', 1926



THE CHILDREN

THE COMPARATIVE EFFICIENCY

OF

SYNTHETIC FARMYARD MANURE, DRY LEAF MANURE,
AND CATTLE MANURE

BY

K. R. NARAYANA IYER, B.A.

(Agricultural Research Laboratory.)

In leaflet No. 127 (precised in our Editorial Notes on December 12, 1925, *Ed.*) describing the method of making Synthetic farmyard manure from waste materials, mention had been made that small field scale experiments would be undertaken to find out the comparative merits of synthetic farmyard manure prepared from dry leaves as such, and ordinary cattle manure. The results of these experiments are available now and are published for the information of the public.

EXPERIMENT

In duplicate plots of equal dimensions, 16 ft. by 8 ft. prepared in the Quilon Office Garden, equal quantities (33 lbs.) of the above three different manures were applied in the usual manner. There were also two control plots. One week afterwards, horsegram was planted in all the plots in rows of six each. After 10 days' growth, the seedlings were thinned out from each row so that all the plots contained more or less the same number of plants. The plots were weeded twice before the crop was harvested. The following table gives the average yield of both grain and hay obtained from duplicate of each series.

	Control	Dry leaves	Synthetic farmyard manure	Cattle manure
Grain	157 grams	200 grams	420 grams	478 grams
Hay	570 „	900 „	1140 „	1350 „

From the above table it is easily seen that synthetic farmyard manure made in the manner recommended is twice as efficient as dry leaves judged by the yield of grain and is nearly as efficient as cattle manure judged by the yield of both grain and hay. Prepared under properly controlled conditions, there is every reason to think that it will be as good as ordinary cattle manure.

' Travancore Government Gazette ' of March 23, 1926.

THE EARLY HISTORY OF THE RUBBER INDUSTRY

(Continued from page 233, issue of April 3, 1926.)

In his —i.e., Hancock's—famous 'Narrative' it is recorded that his first experiments were made with solutions of rubber in turpentine, but he soon abandoned this line of investigation owing to the coatings drying badly, a defect which had been encountered by Macquer over fifty years previously. We now know that turpentine functions as an oxygen carrier, and is therefore liable to cause deterioration in the physical properties of rubber.

Hancock then tried cutting thin strips of rubber from the 'bottles' of Para rubber with a view to using these for various articles of clothing in which elasticity was desired, and on April 29, 1820, he applied for a patent relating to articles such as gloves, braces, stockings, garters, shoe sides and shoe soles. These articles appear to have 'caught on' immediately, and it was not long before Hancock was faced with the problem of the supply of raw material and the accumulation of useless small scraps in his works. He, like Grossart, had already noticed that warm, freshly-cut strips from the raw material would unite under pressure, and he drew the inference that if he chopped his waste sufficiently fine and pressed the product he should obtain the same result. The mincing of rubber proved to be a difficult operation, and it struck him that the same result might be secured by tearing the rubber to shreds. He therefore constructed a small experimental apparatus to test the idea. This consisted of a hollow wooden cylinder studded with teeth within which a wooden core fitted with spikes could be rotated. Into this primitive little apparatus he inserted about 2 oz. of his scrap rubber with the expectation that it would speedily be reduced to shreds by the action of the spikes. But the effort required to operate the machine became greater, and not less, as the treatment continued, and when he came to open the machine he found that the scrap had become welded into a solid homogeneous roll. This he found could be shaped into a block by pressure in a mould, and subsequently cut far more conveniently than the irregular pieces of crude rubber which he had hitherto used.

This little arrangement, known as a 'pickle,' is the prototype of our modern 'mills' and masticators, and its discovery in 1820 may be said to mark the beginning of the rubber industry. By its use Hancock was not only enabled to solve the problem of his rubber supplies and waste material, but was led to investigate the effects of mixing other substances with rubber, and to be the discoverer of the process of rubber compounding a few years later. In conjunction with the work of Charles Macintosh, these two inventions were to lay the foundations of the rubber proofing industry and to lead to an immediate and remarkable extension in the number of applications for rubber.

In the year 1819 Macintosh—a manufacturer of mordants and dyes for the textile industry—contracted to purchase the by-products of the Glasgow gasworks for a term of years, his intention being to separate the ammonia

for use in the preparation of 'Cudbear.' This left him with the problem of disposing of the other constituents of the liquor, and in the course of his experiments he made some tests to determine whether the naphtha was a satisfactory solvent for rubber. The result was a patent in 1823 for the preparation of rubber-proofed fabrics and the establishment of the first factory at Campie, near Glasgow. From the evidence in an action to protect this patent from infringement which was heard in 1836, we know that Macintosh from the start was purifying his naphtha by distillation, and it is possible that he isolated benzene in a technical scale prior to its discovery by Faraday in 1825 amongst the products derived from oil gas.

Within a year from taking out his patent Macintosh was receiving important orders from the Government for proofed goods, and he came to the conclusion that his chemical works were neither suitable nor adequate for the big developments in prospect. He therefore looked round with a view to securing colleagues possessing the experience necessary to perfect a process more textile than chemical in nature. Early in 1824 he entered into partnership with H. H. Birley, Joseph Birley and R. W. Barton, who possessed a cotton works in Cambridge Street, Manchester. Here a new works was built, and the process of manufacture was transferred from Glasgow to Manchester, where it still continues on the original site. Meanwhile Hancock had been extending his experiments to find fresh applications for the masticated rubber prepared by his secret process, and he soon found that this was specially suitable for the preparation of solution, not only being more readily dissolved than the original rubber, but permitting the preparation of more concentrated solutions. He immediately recognized the importance of the Macintosh patent, and at once opened negotiations for a licence to employ coal tar naphtha. He secured this in 1825, and as a result was enabled to use a cheap solvent for proofing, free from the defects of turpentine. This transaction gave him a marked advantage over Chas. Macintosh and Co., in that his mastication process enabled him to employ solutions of at least double the strength of those of his competitor.

During this early period rubber goods steadily gained in popularity. To those who may be under the impression that the general employment of rubber did not begin until after the discovery of vulcanization, it may be of interest to cite some of the uses during the period 1820-1825. In his book Hancock refers to the use of rubber strip for a variety of purposes, while it is stated that cut sheet tubing was made as early as 1822. Air-proof and waterproof articles became popular from the moment they were placed on the market by Macintosh, and in 1824 Sir John Franklin included waterproof covers for boats, air mattresses, air pillows, and a number of life preservers in the equipment for his Polar expedition. Moreover, a demand speedily arose in connection with a number of industrial applications, amongst which may be mentioned rubber rollers, calico printer's blankets, cards for carding machines, deckle straps for paper machines, driving belts and billiard table cushions.

About the year 1825 the demand for rubber for surgical purposes began to be appreciable, and this business was taken up by John Hancock, who established a factory at Fulham for making up sheet prepared in his brother's factory in Goswell Road. John Hancock also turned his attention to the

manufacture of rubber hose for various purposes, and by 1826 the Norwich Union Insurance Company had substituted this for leather on their engines, and the other companies soon followed suit. Barclay and Co. adopted rubber hose in their brewery about that time, and the beer engines in the taverns round London were all equipped with rubber tubing before 1830.

These facts will indicate the rapid progress made by the new industry in Great Britain, and this naturally did not pass unnoticed abroad. The year 1828 saw the establishment of the first rubber works in France under Hancock's personal supervision, while in 1832 the Roxbury India-Rubber Company was started by John Haskins and Edwin M. Chaffee in the United States. With the latter we shall have to deal later, and meanwhile it will suffice to summarize the events at home until the year 1839. By 1830 Charles Macintosh and Co. had become convinced of the superiority of Hancock's solution for spreading purposes, and opened up negotiations with a view to arranging for the installation of the necessary plant in the Macintosh works. As a result, a trading agreement was made between the two firms, followed four years later by an amalgamation, Hancock becoming a director of Chas. Macintosh and Co. and his works being taken over at a rental of £91 per annum, though some years later these were transferred to his nephew, James Lyne Hancock.

From the year 1834 until his retirement in 1857, Hancock continued to act as a director of Chas. Macintosh and Co., an association which is commemorated in the well-known trade mark of this company. Apart from disastrous fires which destroyed the works in Goswell Road in 1834, and those in Manchester four years later, the only event of importance which calls for mention is the invention of the spreading machine by Hancock in 1837. This made it possible to supersede the primitive process so far employed by one which, with slight modifications, is in general use to-day.

To sum up, it may be said that by 1839 the majority of the standard processes for the manufacture of rubber had been discovered. In the course of twenty years Hancock had invented the mill and the masticator, had discovered the use of compounding ingredients and the process of moulding, and, in conjunction with Macintosh, had placed the proofing industry on a firm foundation. The methods of preparing cut sheet and rubber thread had been worked out, and the United States, the calender had been invented by Chaffee. One fundamental difficulty only remained unsolved—that of the tendency of rubber goods to become hard and stiff in the cold, and soft and adhesive when exposed to heat or rubber solvents.

THE DISCOVERY OF VULCANIZATION

We must now turn our attention to the United States, where the manufacture of rubber goods was started in 1832 on the formation of the Roxbury India-Rubber Co. by Haskins and Chaffee. Immediate difficulties were encountered owing to the adhesive nature of the rubber, probably due in part to the use of turpentine as a solvent, and it was speedily found that the goods placed on the market were stiff and hard in winter and decomposed or perished during the hot summer months. Consequently the Roxbury Company and a number of other enterprises

which had started about the same time were forced to close down, and public confidence in the possibilities of rubber manufacture were seriously shaken. At this unpropitious moment Charles Goodyear, a dealer in agricultural implements, became interested in the matter, and, undaunted by failures, public indifference, and, occasionally, want and imprisonment for debt, he finally succeeded in overcoming all the difficulties and produced articles made of rubber which were non-adhesive, tough, durable, and unaffected by weather conditions and the action of ordinary rubber solvents.

Goodyear's preliminary experiments, in which he first tried the effect of compounding with magnesia and subsequently a process involving dipping in dilute acid solution, proved to be failures. In 1835, however, he came in contact with Nathaniel Hayward, who appears first to have become interested in rubber in connection with some experiments to prepare a waterproof blacking. Hayward, after some preliminary experience in one of the early rubber companies which failed, took over the derelict rubber plant of the Eagle Rubber Co., at East Woburn, Mass., and after many experiments discovered (according to his account, as a result of a dream) that when sulphur was admixed with rubber and the product exposed to the sun it acquired a tough, durable surface. Upon Goodyear's suggestion he took out a patent for the process in 1829, which Goodyear acquired for the modest sum of \$200. Both men continued their experiments, more or less in conjunction, with a view to discovering some method which would extend the surface effect of 'solarization' uniformly throughout the whole thickness of the rubber. In the winter of 1839 the accidental exposure of a sample of rubber containing both white lead and sulphur to the heat of a stove provided Goodyear with a solution to the problem, and resulted in the discovery of the 'dry-heat' process of vulcanization.

To what extent Charles Goodyear was indebted to Hayward in this invention is uncertain, but it is probable that the latter deserves more credit than he is usually given. Fate, however, decreed that Goodyear should share the credit of this fundamental discovery with another, and we may now pass on to the circumstances which led to Thomas Hancock's appearance in the picture. Neither Goodyear nor Hayward was in prosperous circumstances at this time, and the previous disastrous failures had rendered the American public chary of supporting any enterprise connected with rubber. This probably accounts for the fact that it was not until December 6, 1841, that Goodyear applied for a United States patent, and began to look elsewhere for a field to develop his ideas. About this time he appears to have come in contact with a young Englishman, Stephen Moulton, then on a visit to the U.S.A., and to him he entrusted some samples for submission to Charles Macintosh and Co. with a view to their purchasing the secret.

On his return Moulton approached a friend, William Brockedon—watchmaker, artist, author and inventor—who was in touch with Chas. Macintosh and Co., and through him submitted Goodyear's samples and proposals. The firm, however, decided that they would require fuller details before they could consider the matter, and recommended that a patent should be taken out for the process. Here the matter might have ended had not Brockedon and Hancock been impressed by the possibilities of the new products.

(To be continued)

TEA GROWING

IN

EAST AFRICA

Tea growing in East Africa on a commercial scale has hitherto been confined to the Mount Mlanje district of Nyasaland, where perhaps 5,000 acres are under this crop. In 1924-25 Nyasaland exported 1,058,504 lb. of tea, this quantity being an increase of about 95,000 lb. on the 1923 figures. In spite of the somewhat high cost of transport to England the crop can be produced in Nyasaland at a satisfactory profit, and tea grown in that protectorate is, of course, entitled to the benefit of the preference accorded to Empire-grown teas. Nyasaland's tea-growing industry is about 15 years old, the present output having developed from a production of only 42,042 lb. in 1910. As it takes about 6 years for the plants to come into full bearing the initial capital required is larger than that which will suffice for annual crops such as cotton and tobacco, and this circumstance makes tea planting less popular with men possessed of small means than the cultivation of more immediately remunerative crops. Moreover, the area suitable for tea growing is very limited, since a distribution of the annual rainfall which is exceptional in South and East Africa is required for the successful cultivation of tea on an economic basis. The tea plant will grow well in many districts, but in order that it should continue 'flushing' throughout the year and so enable more or less continuous plucking to be carried on, a well-distributed and heavy rainfall of 90 to 100 inches per annum is necessary. Unless frequent plucking is possible it is useless to attempt to grow tea in competition with Asiatic countries where more favourable climatic conditions exist.

RAINFALL CONSIDERATIONS

The typical distribution of the rains in tropical Africa takes the form of a period of about four months of heavy rainfall, two months of light intermittent rains, and six months in which little or no rain falls. For this reason the growth of tea on an economic basis is impossible except in isolated areas, none of them of large size, where for topographical reasons the normal African conditions of rainfall are substantially modified. Such areas are confined to the south-east slopes of high mountainous districts where the altitude is sufficient to cause the precipitation of the moisture carried by the south-easterly trade winds. Mount Mlanje, which attains an altitude of over 9,000 feet, is such an area and it is on the south-east slopes of this mountain mass that the Nyasaland tea plantations are located. The total area suitable for tea is about 20,000 acres. There are other similar areas in East Africa, but they are not numerous, and the amount of land suitably situated for tea is nowhere extensive. Nevertheless in the aggregate a considerable acreage is available and possibilities in the direction of extending tea growing in this part of the world are beginning to attract attention.

In Nyasaland itself there are small areas on the West side of Lake Nyasa between Bandawe and Nkata Bay, where the rainfall is apparently adequate and well distributed, as the result of the existence of a high-mountain mass to the north-west. This district is in communication by means of lake steamers with Fort Johnston at the south end of the lake, whence there is a good motor road to the railway from Blantyre to Beira.

OTHER SUITABLE DISTRICTS

In Kondeland (Tanganyika Territory) at the north end of Lake Nyasa, where similar conditions of rainfall and a rich disintegrated lava soil are found, there is a rather larger area which should prove well suited to tea growing, though communications are at present difficult. In other parts of Tanganyika, Kenya, and Uganda, on the south-east slopes of such mountains as Kilimanjaro, Mweru, Kenya, and Elgon, which are all reasonably accessible, it should be possible to establish successful tea plantations. A certain amount of tea is already being grown at Limoru, on the Uganda Railway, between Nairobi and the west rim of the Great Rift Valley, and tea growing is arousing a good deal of interest in Kenya.

In Portuguese East Africa there are several small areas which should be suitable for tea. The Mount Mlanje region of Nyasaland extends into Portuguese territory, and one large plantation undertaking with headquarters in Lisbon has about 500 acres under tea. The production is at present in the neighbourhood of 45 tons per annum, and a small factory has been established. The Mount Namuli table and between Mlanje and the sea is an elevated region which should provide the necessary climatic conditions. Near the south-east end of Lake Nyasa and east of Chiromo are other localities where the possibilities are worth investigating.

Tea grown in Portuguese territory would not be eligible for the preference granted in Britain in the case of Empire-grown teas, and there is a very limited local market at Lourenco Marques and Beira. Nor is the consumption of tea in Portugal, where a 50 per cent preference is accorded, sufficiently large to absorb more than a fraction of the quantity that could be produced in Mozambique. On the other hand, the shorter distance from the coast and possibly cheaper working costs might, in the case of some of the less remote districts suitable for tea growing in Portuguese East Africa, render the cultivation of the crop in Mozambique for the London market only slightly less attractive than its growth in British territory, in spite of the preferential advantage (of $\frac{1}{2}d.$ per lb. *Ed.*) enjoyed by Empire-grown tea.—*The Times*.

LETTERS TO THE EDITOR

(The 'Planters' Chronicle' is not responsible for the opinion of its correspondents.)

Tea in Coorg

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

I am told that tea was planted on a 'large scale' between 'Mercara and the Bisle Ghat', and proved a failure. Would one of your Coorg readers kindly let me know if this was the case, and the extent, and when planted? I am an old resident in Mysore but do not appear to have heard of it, hence this letter.

HASSAN,
March 31, 1926.

Yours, etc.,
CURIOUS.

Grassy Flavour in Coffee

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

A member of our Union has forwarded me a copy of the letter signed B. W. R. on the above subject in your issue of January 23, 1926.

This question was very fully discussed at a recent General Meeting of our Union held on March 5, when the view was fairly generally expressed that this flavour is possibly caused by washing in dirty water.

You may remember that the original article in *Tropical Life* (reproduced in our issue of January 3, 1926) mentioned that this flavour was usually more prevalent in very dry seasons, and suggested that the plant absorbed some salt content in very concentrated form owing to lack of moisture and so developed this flavour.

At our General Meeting I instanced an experience of my own in 1922 when I was forced to obtain my water for pulping and washing from a well and found that the water so used was finding its way back into the well and being used over and over again. The coffee treated at that time had a distinct 'Grassy Flavour.'

Another member quoted a similar experience. It was also suggested that if pulp was allowed to escape into the river, the water there might be affected in dry seasons for users lower down stream.

Another suggested cause is that coffee may pick up this flavour from silt during shipment.

I am asking our Agricultural Department to enquire into the possibility of this.

THE COFFEE PLANTERS' UNION

OF KENYA AND EAST AFRICA.

P.O. Box 381, NAIROBI.

March 11, 1926.

Yours, etc.,

CHARLES GAITSKELL.

Secretary.

Piffering

THE EDITOR,

'THE PLANTERS' CHRONICLE',

SIR,

MADRAS.

In the interest of the planting community, I feel it is my duty to draw attention to some evil practices becoming increasingly prevalent on the part of some local petty dealers and cart men.

One of the evil practices is that rather attractive prices are offered by some merchants for parchment tails lying on the estates, with a view to exchange it for good parchment from the cart men on the way; in which case no shortage will likely to be found on delivery at the coast. Is it not high time that steps should be taken to stop this evil?

Another evil equally bad is that the cart men tamper with valuable chemical manures on the way to the estate adulterating them with some useless stuff such as sand, silt, etc., of the corresponding colour of the manure and thus cause heavy loss to the estates by these dishonest means. In some cases, it is possible that the consignment might weigh more than the actual weight. I fear the present legislation will not be enough. I need hardly say that every bag ought to be thoroughly examined before delivery is taken on the estates.

BALEHONNUR,

KADUR.

April 2, 1926.

Yours, etc.,

S. L. MATHIAS.

BANGALORE—CENTRAL HOTEL. 'The Best in the Station.'

(d) *Précis of reports on the London Market received on Monday, April 5, and covering the seven days ending Tuesday, March 16 :—*

(1) *Tea.* The English Mail has failed to bring us the London Tea Brokers' Report for the week ending March 13th and consequently the averages shown on the preceding page are still one week in arrears and touch no part of the period dealt with in this précis. From other sources, however, we learn that demand for the Indian Tea offered during the seven days ending March 16th remained fairly good ; and that good to fine qualities realized steady rates though the prices for common to low mediums showed a slight falling off. During the first two months of 1925 the London bonded stocks increased from 199,000 to 231,000 pounds, whereas in the corresponding period of the current year the stocks have decreased from 203,000 to 202,000 pounds.

(2) *Rubber.* During the period under review the London stocks increased from 10,498 to 11,670 tons ; as against 20,572 tons in the middle of March 1925. Throughout the seven days the ' spot ' price remained at about $\frac{1}{2}d.$ above the closing price—2s. 5 $\frac{1}{2}d.$ —which we gave last week as the quotation for March 9th. Controversy regarding potential production in Malaya continues. By this mail for instance comes Messrs. Symington and Sinclair's statement that it is unlikely that the majority of the estate can reach 100% of the Standard Output : while the Negri-Sembilan Planters' Association considers the market will again be flooded with unwanted rubber unless the Restriction Scheme remains in force.

(3) *Coffee.* Indian offerings continued small during the seven days under review ; but steady prices were realized for such lots as were sold.

III. Weekly Rainfall Statement

From April 1, 1925, up to and including, Saturday, April 3, 1926

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Kalthuritty	0·88	96·30	97·18	19. Coonoor ...	0·29	92·71	93·00
2. *Tenmalai.	...	108·51	108·51	20. Kotagiri ...	...	73·08	73·08
3. Mundakayam.	1·03	158·99	160·02	21. Ootacamund	...	54·33	54·33
4. *Peermade.	...	176·66	176·66	22. Yercaud ...	...	60·06	60·06
5. Twyford ...	0·14	202·72	202·86	23. Devala ...	...	132·24	132·24
6. V'periyar ...	0·42	83·56	83·98	24. Gudalur ...	...	74·85	74·85
7. Kalaar ...	...	214·90	214·90	25. CALICUT ...	0·01	136·59	136·60
8. Chittuvurrai	...	65·50	65·50	26. Kuttiyadi ...	...	179·57	179·57
9. BODI'KANUR	0·30	29·04	29·34	27. Vayittiri ...	...	160·53	160·53
10. COCHIN ...	0·06	112·62	112·68	28. Manantoddi.	...	111·58	111·58
11. *Mooply ...	0·36	116·62	116·98	29. Billigiris ...	...	71·32	71·32
12. MooplyValley	...	127·20	127·20	30. *Sidapur ...	0·25	74·44	74·69
13. Pachaimalai	...	124·86	124·86	31. Pollibetta...	1·10	85·83	86·93
14. Mudis ...	1·78	204·99	206·77	32. Somwarpett	...	86·19	86·19
15. POLLACHIE.	...	30·85	30·85	33. Ballupete ...	...	76·12	76·12
16. Manjeri ...	...	126·58	126·58	34. MANGALORE.	...	139·40	139·40
17. Nilambur ...	...	101·43	101·43	35. MADRAS ...	...	63·35	63·35
18. Naduvattam	0·31	84·63	84·94				

W = During the week.

P = Previously. N. R. = No return.

* = U.P.A.S.I. Ex. Station.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 16] SAT., APRIL 17, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	251	History of Rubber Industry	255
Wynaad P. A. Meeting ...	252	Rubber—Wet-Root Rot ...	258
U. P. A. S. C. Cross Word		Tea—Indigofera Endecaphylla.	262
Puzzle ...	253	Commercial and Meteorolo-	
R. G. A. S. I. Branch Meeting.	254	gical ...	265

EDITORIAL NOTES

At the end of last week we sent out to each of the seventeen Superintendents concerned a supply of 52 stamped Post Cards on which they will be able to send us Rainfall Returns for the period beginning with the week ending April 10, 1926, and ending with the week ending April 9, 1927. Data for the other eighteen of the thirty-five Stations are supplied by Government every week. We are sure that all our Readers are greatly appreciative of the trouble which our Honorary Correspondents take each week in order to keep these informative Rainfall Returns up-to-date.

Owing to the 13th and 14th instants being Commercial Holidays, this week's issue has to go to Press on Monday instead of on Thursday night, and consequently matter for publication which has not reached us by the former day will be unavoidably held over until the issue of 24th.

The following Communique was recently tabled at the Secretariat, Colombo, Ceylon.* 'With regard to the discussion which took place at Delhi in connection with the question of the Standard Wage on estates, it is hereby notified for general information that the discussion resulted in a general agreement regarding the method of establishing standard rates of wages on Ceylon estates. It is proposed to introduce the necessary legislation in due course.'

The Hon. the Law Member in the Government of Madras informed Mr. J. A. Saldanha in the Legislative Council on the 24th ultimo that a dry dock in connection with the Cochin Harbour had already been constructed at a cost of Rs. 4.21 lakhs; that the estimates for the remainder of the work had been sanctioned; and that the necessary expenditure during the current year will probably amount to £106,000.

The Secretary of the Madras Agricultural Students' Union is arranging an attractive programme for next July in connection with the Golden Jubilee Celebrations of the foundation of the Agricultural College at Coimbatore in 1876. The items include the opening of a New Building for Teaching by His Excellency the Governor of Madras, an Agricultural Exhibition, Lectures by distinguished personages, Conferences, and—on the lighter side—Entertainments and Sports.

*Agricultural
College,
Coimbatore*

WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Ordinary General Meeting held at Meppadi Club at 3.30 p. m. on April 7, 1926.

Present

Messrs. B. M. Behr (*Chairman*), J. E. Bisset, W. G. Craig, B. St. J. Boulton, H. C. Davies, T. P. Gauld, J. A. Gwynne, R. W. M. Hay, S. H. Powell, E. C. Sheward, R. P. N. Swayne and I. W. Finlayson (*Honorary Secretary*).

Visitor

Mr. J. Aird.

The notice calling the meeting was read.

The proceedings of the last meeting were taken as read and confirmed.

1. *Adoption of Accounts as at March 31, 1925.*—The Hon. Secretary read the auditor's report.

Mr. S. H. Powell moved, 'That the statement of accounts and auditor's report for the year ending March 31, 1925, be adopted.'

Mr. H. C. Davies seconded the motion.

Carried unanimously.

2. *Other Competent Business.*—(a) Read a letter from the Secretary, Madras Agricultural Students' Union, regarding the celebration of the Golden Jubilee of the Agricultural College, Coimbatore. It was decided to leave the question to the UPASI.

(b) *Terms of Employment of European Employees of the Labour Department, U. P. A. S. I.*—The Hon. Secretary was asked to circulate to members the correspondence received from the Director of the Labour Department.

(c) *Combined Control Committee Meeting held at Ooty on February 24, 1926.*—Mr. T. P. Gauld proposed and Mr. J. E. Bisset seconded, 'That this Association wishes to record its strong protest at the action of the Director of the Labour Department in altering the time of meeting of the Combined Control Committee held at Ootacamund on February 24, 1926, without giving due notice.'

Passed unanimously.

(d) *Meppadi Bazaar.*—Mr. S. H. Powell and Mr. R. P. N. Swayne asked if the Association would press for the reopening of Meppadi Bazaar.

The Chairman promised to take this matter in hand.

(e) *Malabar District Board.*—The Chairman was also asked to take up the question of the representation of this Association on the Malabar District Board. The names of Messrs. T. P. Gauld and H. C. Davies were proposed in this connection. The Chairman said he would take the matter up. The Meeting then closed with a hearty vote of thanks to the Chair.

IAN W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

THE U. P. A. S. C. CROSS WORD PUZZLE

We regret that the labours of the Honorary Correspondent, who contributed a Cross Word Puzzle to our issue of March 20, 1926, have not had the desired effect of securing an appreciable contribution for the coffers of the U. P. A. S. C. We realized of course that many of our men readers would possibly be so preoccupied with their daily duties that very very cross words would be the lot of any one who endeavoured to tack them down to a Cross Word Puzzle during their problematical leisure hours. At the same time we hoped that even they would find themselves interested in our Correspondent's competition as being the people privileged to supply numerous entrants from among the fair sex of the Planting Community with rupee notes to annex to the solutions sent in.

However, only two solutions were received. Mrs. Gall of Bonaccord Estate sent in a solution which only differs from the Author's in that it showed a ' ? ' instead of a ' Y ' in the Isolated Square No. 47, and it seems to us a moot point whether the discrepancy is not an improvement; for though of course ' ? ' is not strictly a letter yet on the other hand ' Y ' is not an exact onomatopœous equivalent of ' Why ', because the letter ' Y ' is innocent of the ' h ' sound. The other solution, which was sent in by Mrs. Mackenzie of Panniar Estate, differed from the Author's in three respects; as it showed ' O ' instead of ' W ' in Square 27, ' & ' instead of ' Y ' in Square 47, and ' E ' instead of ' A ' as the last letter of ' Koa ' 25 Across. The last mentioned error was possibly an oversight; and the first may be due to a commendable but we are sure wholly unnecessary modesty on the part of the Solver which led her to improve on the Pauline Phrase ' οὐθέν εἰμι ' ' I am as nought. For the benefit of competitors who tried but failed to solve the Puzzle the correct solutions are given below :—

Across :—1. Comprehensiveness; 17. Avenue; 18. Avital; 19. Admitter; 20. Pythonic; 21. Re; 23. An; 24. Armadillo; 25. Koa; 26. Yam; 27. W; 28. Bar; 29. Ere; 30. Reget; 34. Brook; 35. Plait; 39. Lungi; 40. Henna; 41. Epagoge; 42. Dahlia; 45. Cr; 46. Serene; 47. Y; 48. Me; 49. Cii; 50. Splr; 51. Pra; 53. Iota; 54. Nse; 55. Be; 57. Homo; 59. Men; 60. Eyd; 61. Albino; 64. Abkari; 65. Overate; 67. Sesquipedalianism.

Down :—1. Characterlessness; 3. Mammock; 4. Pvi; 5. Retractation; 6. Enter; 7. Hue; 8. Eer; 9. Sap; 10. Ivy; 11. Vital; 12. Ethnographic; 13. Nao; 14. Eln; 16. Sacramentarianism; 22. Odontoid; 25. Kye; 25. (a) Oar; 31. Eupepsy; 32. Gnarled; 33. Egger; 34. Bee; 36. Lea; 37. An; 38. Inciter; 41. (a) Gemel; 43. Amphora; 44. Hero; 49. Coma; 52. Amati; 55. Babu; 56. Hive; 58. Obea; 62. Bop; 63. Ned; 66. Al.

Bewildered by this appalling array of *sesquipedalia verba*, we leave our Readers to decide for themselves whether the palm for ingenuity should be awarded to the Composer for her recondite puzzle or to the entrants for their prowess in 41 Across. Compared with such experts, and remembering our own several perfectly futile attempts to solve the Puzzle with a view to carrying off the handsome price which we confidently hoped would be available; we feel that we do not even deserve Mrs. Mackenzie's modest rendering of Square 27 to be applied to us, because as Cross Word solvers we are right out of the picture and indeed far less than half of nothing at all.

RUBBER GROWERS' ASSOCIATION

SOUTH INDIAN BRANCH

Proceedings of the Annual General Meeting of the South Indian Branch of the Rubber Growers' Association held at the Cochin Club, Cochin, on Saturday, April 10, 1926.

Present

Mr. J. J. Murphy ...	Chairman.
„ H. D. Patch ...	Messrs. The Madura Company.
„ W. J. Walmsley ...	Messrs. The Mooply Valley Rubber Company.
„ L. A. Lampard...	Messrs. Harrisons and Crosfield.
„ S. C. Forsdike ...	Messrs. Aspinwall and Company.
„ H. R. Carson Parker ...	The Kaliyar Estate.
„ G. McPherson...	The Mundakayam Estate.
„ H. T. Ashplant ...	Rubber Specialist.
„ H. Waddington ...	Secretary.

The Proceedings of the last Meeting held on April 27, 1925, were read and confirmed.

Proposed by the Chair and carried unanimously,—

That the re-organization proposals made by the Rubber Growers' Association in its circular letter dated May 7, 1925, as amended by the United Planters' Association of Southern India at its last Annual General Meeting, be adopted with the exception of Clause 2 (c).

The Meeting then resolved itself into,—

The First Meeting of the *Southern India Committee of the R. G. A.*

Present

Mr. J. J. Murphy ...	Chairman.
„ H. D. Patch ...	Members of the Committee.
„ W. J. Walmesly ...	
„ H. R. Carson Parker...	
„ G. McPherson ...	
„ L. A. Lampard ...	

Visitors.—Mr. S. C. Forsdike, Mr. H. T. Ashplant and Mr. H. Waddington.

Proposed from the Chair,—

That the Chairman and Secretary draft Rules for the new Committee and circulate them to members.

Carried.

A discussion then ensued regarding the additional points, not dealt with in the R. G. A.'s letter, which it is necessary should be included in the Rules; and the following suggestions were accepted:—

1. That the name of the new Committee be The Southern India Committee of the R. G. A.

2. That the Chairman be the active member for rubber on the Executive Committee of the United Planters' Association of Southern India.

3. That an Annual Meeting of which three weeks' notice should be given be held once a year at such time and place as shall be fixed by the Committee.

4. That Meetings of the Committee, of which 14 days' notice shall be given, may be called at any time on requisition by the Chairman or any two members of the Committee.

5. That the Rules shall provide for the calling of meetings of all interests connected with the Rubber Growers' Association in Southern India from time to time.

The Meeting then proceeded to elect a Secretary, the names of Messrs. L. A. Lampard and H. D. Patch being put forward. Mr. Lampard having intimated that he regretted his inability to accept the appointment, Mr. Patch was unanimously elected.

The Secretary of the U. P. A. S. I. was requested to hand over to Mr. Patch as soon as convenient; and the Chairman proposed a hearty vote of thanks to Mr. Waddington for his services in the past which was carried with acclamation.

The Meeting then considered the proposals regarding the new Rubber Experimental Station at Arnikolam; and it was suggested that the building required as quarters for the Writer in charge should be built on the land belonging to the U. P. A. S. I. Mr. Ashplant pointed out that it would probably be more satisfactory if the Writer's House was situated close to the Cooly Lines, and he was asked to consult Mr. Harley and settle with him regarding the site on which it should be erected.

Mr. Murphy raised the question of finance; and drew attention to the circular letter issued by the Secretary, U. P. A. S. I., dated March 10 last in which it was stated that under present contributions there would be a deficit of some Rs. 2,200 per annum.

Mr. Ashplant said that he had estimated for an expenditure of Rs. 5,000 per annum, understanding that when the experimental stations at Tenmalai and Mooply were closed down the amount now spent on them, approximately Rs. 10,000 would be available; but that it would probably not be necessary to spend as much as Rs. 5,000 and possibly Rs. 3,000 would suffice.

Proposed from the Chair,—

That this Committee approves the Arnikolam Experimental Station Scheme, and informs the United Planters' Association of Southern India accordingly and guarantees to arrange for any deficit during the next five years not exceeding Rs. 12,000.

Carried.

With a vote of thanks to the Chair the proceedings terminated.

THE EARLY HISTORY OF THE RUBBER INDUSTRY

(Continued from page 245 issue of April 10, 1926)

Hancock was at this time carrying out experiments with the object of making single-texture waterproof garments—articles which had hitherto been unsatisfactory owing to the tackiness of the surface of the rubber. It was evident that a process which not only rendered rubber unaffected by extremes of temperature but also would deprive it of tackiness was one of the greatest technical value, and the knowledge that this result had been secured naturally encouraged Hancock to redouble his efforts to discover the solution to the problem.

At the beginning of 1843 he began to investigate the matter in his private laboratory in the roof of his house at Marlborough Cottage, Stoke Newington. One of the samples supplied by Moulton was of a yellowish grey colour, and Hancock appears to have detected the fact that this appearance was largely due to a surface deposit or 'bloom' of sulphur. He, therefore, made a large variety of samples of rubber containing sulphur

in conjunction with other ingredients, and subjected them to different treatments, including the effect of heat. But his experiments produced no improvement in the properties of the rubber, since he did not use either litharge or white lead in his mixing constituents, and these are essential for vulcanization to take place in the presence of air. His ignorance of this fact was, however, providential since it resulted in the discovery that the 'change' could be effected by the action of sulphur alone under certain conditions.

So convinced was Hancock that sulphur was responsible for the effect that he took out a provisional patent on 21st November, 1843, which allowed him six months to work out the details of his final specification. In the interval the happy inspiration came to him to try the effect of immersing thin strips of rubber in molten sulphur. On removing the sample after an interval he found to his delight that it had become completely changed in character, and realized that his efforts had been crowned with success. Moreover, he discovered that if the treatment of the rubber was sufficiently prolonged it became converted into the black, horny substance which had been mentioned by Bergius many years before. This simple experiment provided Hancock with a complete insight into the technique of the process for the manufacture of soft and hard rubber, and he immediately took steps to draw up the details of his complete specification, for which he secured the assistance of Thomas Graham and Arthur Aiken, the first president and secretary of the then newly-formed Chemical Society.

In the meanwhile, Goodyear's application for an English patent had been lodged, but, unfortunately for him, some ten weeks after the provisional application of Thomas Hancock. In view of the subsequent litigation which took place and the controversy which exists even to-day in regard to the discovery of vulcanization, it may perhaps be of interest to examine in what respects these two inventors differ in their claims.

Goodyear's patent applies only to a 'triple' compound of rubber, sulphur, and white lead or litharge, and it is clear that while the inventor recognized that heating was necessary, he did not appreciate the effect that might be produced by sulphur alone. Hancock, on the other hand, primarily claims the use of merely rubber and sulphur to which other ingredients may be added as required, and he moreover points out that if the heating is prolonged or the temperature high, a tough, horny, black product results. It is therefore clear that Hancock's application must be regarded as the master patent, covering as it does hot vulcanization in all its forms, while that of Goodyear is limited to a special type of compound suitable for vulcanization by the dry heat process. It is to Hayward, however, that the credit must be given for the actual discovery of vulcanization, and, even though his process, involving the use of ultra-violet light, has found comparatively little technical application, there is no doubt that the sample of rubber which he nailed to a board outside the Eagle Rubber Company's works at Woburn directly or indirectly provided the inspiration of Goodyear's and Hancock's subsequent discoveries.

Another name has still to be added to the list of those to whom we owe the introduction of the most important process in the industry—early given by Brockedon the name vulcanization—and this is one of which Birmingham has every reason to be proud. Alexander Parkes, the son of a brass lock maker in Birmingham, in the employment of Elkington and Mason,

early showed special aptitude for invention, and in the course of his work devised a process for electro-plating natural objects. This involved a preliminary treatment with a solution of phosphorus in carbon disulphide, and the high cost of the latter led to his investigating the process of its manufacture and the preparation and uses of other sulphur compounds. As a result he discovered in 1846 that by immersing thin strips of rubber in a solution of sulphur chloride in carbon disulphide, vulcanization took place almost immediately, thus providing us with the well-known 'cold cure' process. A factory for the manufacture of single-texture rubber proofed garments was established in Birmingham, but later the patent was acquired by Chas. Macintosh and Co., and the manufacturing operations were transferred to Manchester. The manufacture of 'white substitute' is also due to Parkes, whose sixty odd patents cover a wide range of industrial processes, the most important being those relating to the desilverization of lead, the refining of copper, and the use of nitrocellulose for the preparation of celluloid.

This brings us to the end of the period during which the technique of the industry was in process of development, and it remains to consider the development of a new use which was destined to bring rubber into the position of one of the world's most important raw materials.

The introduction of this new process gave an immediate stimulus to the young industry, both in Britain and the United States, and reference to the patent files of the period will show that there are few present-day applications for rubber which did not occur to the inventive minds of the period 1840-1850.

In Hancock's *Narrative*, published in 1857, a number of plates are included illustrating the various types of rubber articles on the market at the time, and in many cases these might have been taken out of a present-day trade catalogue. The effect of any invention, however, usually takes time for development and publicity, and the growth of the rubber trade as shown by the statistics for import of crude rubber do not begin to show rapid increase until the period following 1850. For example, in the twenty years, 1830-1850, the imports rose from 23 tons to 381 tons, while between 1850 and 1870 the 381 tons became 7,606 tons.

THE INVENTION OF THE PNEUMATIC TYRE

As some 75 per cent of the total production of raw rubber is now absorbed in the manufacture of pneumatic and solid tyres, it may be of interest to refer to some of the early work which gave rise to this important modern branch of the rubber industry. The mechanically propelled vehicle, like the aeroplane, is an introduction of the present generation, but the idea in each case is far from being of recent origin. As early as 1784 William Symington (an Edinburgh engineer who was responsible for the first experimental steam-boat, tried on the Forth and Clyde Canal in 1788) prepared a model steam-propelled vehicle which was exhibited to the local scientists. During the succeeding forty years the possibilities of applying the steam engine to vehicles attracted the attention of numerous inventors, the most successful of these being Walter Hancock and Goldsworthy Gurney. During the period 1830 to 1840 both these men had succeeded in constructing serviceable steam-drawn vehicles, and it may be a revelation to many to know that regular 'bus services were run during this period in London, between Paddington and the City, by Walter Hancock, and between Gloucester and Cheltenham by Gurney.

(To be continued)

WET-ROOT ROT

FROM

FOMES PSEUDO-FERREUS

BY

A. SHARPLES, A.R.C.S., D.I.C.

Mycologist, Department of Agriculture, S.S. & F.M.S.

Attention has been focussed on this root disease of *Hevea brasiliensis* during the last few years, some observers regarding this disease as one of the possible limiting factors with reference to the longevity of plantations. A typical infection, when seen, is very impressive, the subterranean habit of the fungus giving but little indication of the number of trees infected. Recently, work has been in hand which indicates that it may be advisable to frame a definite policy with reference to combatting this particular disease. The principal features relative to this disease may be briefly mentioned:—

Belgrave (1) first investigated this disease in Malaya but as only imperfect fructifications were found in nature, the causal fungus, isolated from diseased tissue, was named provisionally *Fomes pseudoferreus*. The disease is characterized by a typical 'Wet-Rot' of the roots—the diseased tissue being quite spongy and wet, even in dry soils. The diseased tissue seldom appears above ground level; in surface roots it is common to see the upper part, not in contact with the soil, free from attack, while the under portion, in contact with the soil, is badly rotted. The disease assumes its worst form in old plantations and in some old properties a large percentage of trees can be found, suffering from this disease.

Van Overeem and Steinmann (2) have described a similar disease in Java and consider the cause to be a fungus named *Ganoderma terreum*. The writer (3) has previously stated his opinion upon the position taken up by these authors.

The method of spread of this disease in Malaya is by 'root-contact'; no mature fructifications have been found in this country as yet, therefore spread by spore dispersal cannot be of much significance. It may be mentioned here that three immature fructifications of what appeared to be a *Fomes* sp, were found in close association with one of the diseased trees; it is extremely unlikely that these specimens would have developed into the *Ganoderma terreum* of the Javan investigators (2).

The common method of preventing spread of root diseases, i.e. by means of various systems of isolation trenches, has appeared to be useless with reference to 'Wet-Rot' and advice on the spot for each particular infection, has been considered by the writer as the only satisfactory method of procedure; if the infection was heavy the only method to be recommended was the isolation of the infected group from healthy portions of the estate by means of a continuous trench, without attempting to save individual trees by connecting trenches.

Some months ago an estate with trees of 12-14 years of age first noticed numbers of trees being attacked at the roots. Examination showed typical 'Wet-Root Rot' symptoms and advice was given along the usual lines—i.e. trenching and the uprooting and burning of badly diseased specimens. The Manager, as a matter of interest, began to follow up the

lateral roots of diseased trees to their distal extremities and the position as revealed by this very careful and expensive work became exceedingly interesting.

The basis of advice regarding the measures to be adopted in combating root diseases, is that of how many trees can be saved for the money expended. Up to the present, it has been a fairly general opinion that no positive evidence could be adduced in the way of actual number of trees to be saved by treatment; the underlying idea has been that preventive measures were necessary in order to prevent spread of the disease to healthy portions of the estates. However, the facts to be presented, incomplete though they be, are of such interest, that it may almost be claimed that a complete change of view may be necessary with regard to consideration of treatment of this particular root disease.

After the opening of the first group of trees, it was decided to carry on in the same way for one month before tabulating the figures. The method of operation, was to take a diseased group, and mark all the obviously diseased trees. Badly diseased trees were immediately taken out; the neighbouring trees were next examined and all the roots carefully followed out to their distal extremities often twenty to thirty feet away from the trunk; if any of these trees were found diseased, the opening up was continued to the next neighbouring tree, until healthy trees were found in all directions. This careful examination disclosed the fact that a large percentage of trees could be found, the lateral roots of which were attacked at some distance from the trunk and that by excision of such roots behind the infected portions the disease could be prevented from travelling into the trunk, thus saving a valuable tree which was already infected. Further, careful digging to a depth of three feet showed that the disease was characteristically confined to lateral roots growing in the upper nine inches of soil, so that there was little danger of the fungus gaining an entry into the tap root at a lower level. The first month's figures, July 1925, were as follows:—

No. of trees Examined	Found Healthy	No. treated by severance of Lateral Roots	Badly diseased trees cut out
98	57	23	18

These figures, seem to the writer, to have much significance. Had the work been carried out less thoroughly, twenty-three trees (= 23%) already carrying the disease would have remained standing in the treated area. This means that, in years to come, another and more extensive batch of trees would have to be taken out, and the vicious cycle would continue until large acreages would be involved. The method adopted in this particular case, should be considered not only in saving actually diseased trees, but in preventing infection in the fifty-seven trees found healthy, which were in such close proximity as to be suspected of carrying the disease.

It is important to know how long the work would continue to give figures of the above order. Figures for five months have been obtained and are presented in the table below. There has been some difficulty in

keeping the work going owing to labour difficulties, so that in some months less work was done than in others:—

Month.	No. of trees examined	No. found Healthy	No. treated by severance of Lateral Roots	No. of badly diseased trees cut out.
August ...	209	139	41	29
September ...	182	83	33	66
October ...	64	10	23	31
November ...	175	84	45	46
December ...	123	40	43	40
Totals ...	753	356	185	212

The totalled figures show over the working period practically the same order of figures as was found at the commencement; on the diseased groups treated over fifty per cent—397 against 356, of trees were diseased; of this figure it is claimed that 185, practically twenty-five per cent of the total number of trees opened-up, were saved by the treatment and that this percentage represents actual capital saved. There appears little reason to doubt that if the 185 infected trees, had not been traced down, but had been left standing, that in a few years' time further large losses from the same cause would have had to be recorded.

Without going into details, the cost per tree opened has worked out at just under \$3/- per tree, and a total of approximately \$2250.00 has been spent on the work.

The trees treated by severance of roots can be divided into two classes :

(A) Trees which require severance of lateral roots, usually many feet distant from the tree; this class is larger in numbers than the next class 'B' and the cutting of a root of small diameter cannot affect the tree to any great extent.

(B) Trees which have been infected for such a length of time that the fungus has had time to grow along the lateral root till the junction of stem and root is almost reached; cutting of roots of large diameter means severe root pruning and some effect might be expected.

A few trees only of the above 'B' class have showed evidence of severe root cutting. On the last inspection these trees showed signs of progress and were looking healthier than at the time of treatment.

The work is being carefully controlled and a further report will be prepared at a later date. Meanwhile further efforts should be made to study this disease along these lines. It appears probable to the writer that if this disease works according to the plan exposed in this particular instance, that, if taken in its earliest stage, after the first cases are found, work of this description will materially aid in actual control. Judging by the figures obtained, the disease might be suspected to work in cycles; the first cycle appears some time about the tenth year or after, the second cycle after the fifteenth year and so on. The second cycle would appear to be dependent on the number of trees already carrying the disease which

are exposed by following up the roots of apparently healthy trees in proximity to diseased trees; these trees fall in the group which can probably be saved by treatment. The writer would emphasize that this method is only likely to be economically sound if the disease is tackled in the earlier stages, i.e. during the first cycle.

The 'Dry-Rot' caused by *Ustulina zonata* (Lev.) Sacc. has been considered in connection with the above work. It is found that the remarks regarding treatment of 'Wet-Rot' do not apply to attacks by *Ustulina zonata*. Further remarks regarding this phase of the question may be left for future consideration; the important point at present is to draw the attention of other investigators to the possibility of controlling what is regarded as one of the most serious diseases on mature rubber trees in Malaya. Costs are heavy, but no matter what method of calculating costs of treatment is adopted, the writer thinks that a good case for treatment along the lines indicated has been made out in this particular case, and as long as figures of the same order as tabled are obtained, advice to continue the work should be given.

Since going to press a review of a paper by Dr. C. Van Overeem has appeared in the latest issue of *The Review of Applied Mycology*—Vol. V, Part 1, Jan. 1926. The paper is entitled—*Beitrage zur Pilzflora von Neiderlandisch Indien*, II. (No. 10-13.) 13. *Ueber den roten Wurzelp* I. (Contribution to the fungus flora of the Dutch East Indies. II. (No. 10-13.) 13. (On the Red Root Fungus)—*Bull. Jard. Bot. Buitenzorg*, Ser. III, VII. 4. pp. 436, 446, 1 fig. 1925.

The article is extracted as follows :—

'The author's and Steinmann's previous identification of *Fomes ferreus* with *F. pseudoferreus*, and the use of the name *Ganoderma ferreum* (Berk.) v Overeem and Steinmann for the fungus described by Miss Wakefield under the second of these names (*Kew Bull.*, 1918, 6, p. 208), are stated to be incorrect. Subsequent investigations of material from Samoa, identified by Lloyd as *F. ferreus* has enabled the author (Van Overeem) to come to the following conclusions. *F. ferreus* (Berk.) and *F. pseudoferreus* (Wakef) are two distinct species. The Java red root fungus is *certainly identical* (italics mine. A.S.) with that from the Straits Settlements known under the latter name. The species belongs to the genus *Ganoderma* and should now be known as *G. pseudoferreum* (Wakef) Van Overeem et Steinmann, nov comb, with the following synonyms :—

F. pseudoferreus. Wakef.

G. ferreum. V. O. & Stein. non *Fomes ferreus* (Berk.) ?

Poria hypobrynea. Petch ?

Poria hypolaterita. Berk.

Trametes theae. Zimm.

A full description of the fungus is given.'

The writer has previously stated his disagreement with the views expressed by Dr. C. Van Overeem, and work over another twelve months leads to an emphasis of this disagreement. It is difficult to understand

(1) Belgrave, W. N. C. :—A 'Wet-Rot' of Para Rubber. Bull. No. 28, Dept. of Agriculture, F. M. S. (out of print).

(2) Overeem van C. Dr. and Steinmann A. Dr. :—Over de Roode Worteschimmel van *Hevea Brasiliensis*, Archief Voor de Rubber Culture, Oct. 1925.

(3) Sharples, A :—Some observations on Root Diseases of *Hevea Brasiliensis*, *Malayan Agr. Journal*, Dec. 1924, Vol. XII, No. 12.

Van Overeem's assertion that the Java red root fungus is certainly identical with that from the Straits Settlements when the latter was named *F. pseudoferreus* by Miss Wakefield from an imperfect specimen, as a matter of convenience, this diagnosis to be confirmed, or otherwise, when later specimens were found and sent for examination; as far as the writer is aware no further authentic specimens from Malaya or the Straits Settlements have examined by Miss Wakefield.

In a previous paragraph in this article it was stated that immature fructifications had been found recently but unfortunately these did not reach maturity; however while the writer cannot claim to have any specialized systematic knowledge, it is difficult to visualize these fructifications developing into anything closely approaching the specimen of *G. ferreum* sent by Dr. Van Overeem from Java to the writer. Further, it does not seem possible that this Javan specimen could be confused with any *Poria* or *Trametes* species as he suggests in the synonymy. The writer still maintains the attitude expressed in a previous article (3):—that all doubts can be set at rest if pure cultures from Javan specimens could be established and the results compared with those obtained by Belgrave (1) in 1916.

The Malayan Agricultural Journal.

INDIGOFERA ENDECAPHYLLA

AS A

COVER CROP FOR TEA

BY

T. H. HOLLAND, M.S.E.A.C.,

Manager, Experiment Station, Peradeniya, Ceylon

The growing of creeping cover crops in tea is, in Ceylon, still in the experimental stage.

The advantages of growing such crops would appear to be :—

- (1) By the use of leguminous plants Nitrogen is gained.
- (2) Soil erosion is checked and top soil retained.
- (3) The soil is shaded and loss of humus thus prevented.
- (4) The penetration of the roots of the cover crop helps to loosen the soil.

(5) When the cover crop is thoroughly established weeding expenses are greatly reduced.

(6) There is a gradual increase of humus from the leaves which fall from the cover crop.

Possible disadvantages are :—

- (1) Obstruction to the progress of coolies.
- (2) Harboursing of leeches and snakes.
- (3) Difficulty in applying manures.
- (4) Undue absorption of manure intended for the tea.
- (5) In drier districts, excessive transpiration of moisture with possible detriment to the tea.
- (6) Smothering of the tea bushes by the cover crop.

Of all the creeping cover crops tried on the Experiment Station, Peradeniya, *Indigofera endecaphylla* would appear to be the most suitable for the

purpose in view. The plant is described by the Systematic Botanist as follows :—

‘ Perennial, herbaceous, with green or reddish trailing stems ; rootstock with large tap root ; stems rooting at the nodes, subglabrous ; leaves pinnate, subsersile, canaliculate above, stipules lanceolate ending in a filiform point, pale green ; leaflets six alternate and one terminal on the rachis shortly stalked, obovate, oblong usually mucronate at the apex, hairy on the under surface. Midrib conspicuous, extending from the base to apex ; margin entire ; flowers small, very shortly stalked, arranged in long axillary racemes ; calyx segments almost free, subulate, filiform ; standard broadly obovate, red with a purple blotch at the base ; wing-petal red equalling the keel ; keel-petals purple, connate, spurred at the base, spurs bright green ; stamens diadelphous ; style short, stigma capitate ; legumes straight, glabrescent, six to ten seeded.’

Indigofera endecaphylla seems to supply most of the advantages enumerated above, and few of the disadvantages.

Nodules are found in a large numbers on its roots, showing that nitrogen is being accumulated. It forms an effective cover against soil wash and completely shades the ground. It has a remarkably deep tap root. It effectually keeps down most weeds—couch grass and cora are occasionally found growing through it.

Turning to the possible disadvantages :—

It is quite easy to walk over a field of *Indigofera endecaphylla*. Leeches have not been found in this crop at Peradeniya, though they swarm in the jungle 300 yards away. To apply manures the crops can be cut off with grass knives, rolled up to one side of the row, and the manure applied by envelope forking, leaving the roots in the ground. The crop recovers easily from this operation and an opportunity is afforded to get out any couch grass or other weed growth that has gained a footing. With regard to absorption of manures by the cover crop, this will occur to some extent whatever plant is used : there is however at least a probability that the improved growth of the cover crop will be to the ultimate benefit of the tea. The moisture question may be a potent consideration in the drier districts. It is frequently not realized that ground covered by a leafy crop loses more moisture by transpiration from the leaves of the crop than would be normally lost by direct evaporation. Experience is needed on this point. *Indigofera endecaphylla* will not climb up a bush. Many of the other creeping cover crops in common use will climb up and in the course of time smother any plant with which they come in contact. This point, perhaps more than any other, inclines one to select *Indigofera endecaphylla* as the most suitable creeper for tea.

Indigofera endecaphylla was planted over ten acres of old tea on the Experiment Station, Peradeniya, during the North-East monsoon of 1925.

Tea had been pruned, in the preceding month, every row forked and a pruning mixture applied to alternate rows. The planting was done as follows :—

In addition to women to cut the creepers and carry them to the tea field, one or more gangs were employed for planting. Each gang consisted of one man and two women. The man went ahead up the row with a digging fork, inserted it in the spot to be planted and levered it away from him, leaving an opening in the ground. The first woman received the cuttings from the second woman, put them into the opening and earthed them up with her foot. The second woman followed carrying the cuttings, handed them to the first

woman, and consolidated the earth over the planted cutting by trampling. When the cuttings were $1\frac{1}{2}$ ft. long or more two or three cuttings were pushed into the opening holding them in the middle, leaving the two ends sticking out; if the cuttings were short, three or four cuttings were planted with the butt ends together and the leafy ends sticking out. The method has the advantage that two growing points are provided. In this instance clumps of cuttings were planted as per sketch.

X		X		X		X		X		X		X		X
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
X		X		X		X		X		X		X		X
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
X		X		X		X		X		X		X		X

X—tea bush.

1—clump of *Indigofera* cuttings.

As the tea is planted 4 by 4 ft. it will be seen that the clumps are 2 ft. apart and, as there are two clumps to every tea bush, there will be 2,722 by 2, equal to 5,444 clumps per acre. As stated, the number of cuttings per clump varies between two and four so that in round numbers it might be estimated that 20,000 cuttings would be required to plant up an acre by this method. Half this number, or less still, could be employed, but it would take rather longer to obtain a cover. With a little experience a gang of one man and two women will plant up three-quarters of an acre in a day.

The total cost of planting up 10 acres of tea on the Experiment Station has been Rs. 5-23 per acre which includes the cutting of the creepers and transport over about $\frac{1}{2}$ mile. This does not include any purchase of cuttings. Cuttings of not less than $1\frac{1}{2}$ ft. long are at present being sold by the Experiment Station at Rs. 5-00 per 1,000 cuttings. Two such cuttings would suffice for a clump so that—if the planting system described above is adopted—about 11,000 cuttings costing Rs. 55-00 would have to be purchased to plant an acre.

Within a week of planting most of the cuttings showed active growth, and it is anticipated that in six months' time a fair cover will be formed. If time is not an urgent consideration the best way for an estate to establish the plant is to buy seed and sow this in well prepared nursery beds. Sowing seeds direct in the field has not as a rule been found successful. In a nursery a luxuriant growth of creepers is obtained and a small nursery will give planting material for a considerable area. The cuttings used to plant up 10 acre of tea were taken from an area of about one-seventh of an acre containing a thick growth of *Indigofera endecaphylla* much mixed with grasses and weeds.

A considerable crop of seed will be harvested on the Experiment Station early in 1926. Seed will be sold at Rs. 3-00 per lb. After this seed is gathered a large number of cuttings will be available for sale. There is already a considerable demand for planting material and it is anticipated considerable areas will be planted up in 1926.

Year Book of the Department of Agriculture, Ceylon.

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending April 10th, 1926

Bank Selling Demand Draft on London

5th	6th	7th	8th	9th	10th
Holiday.	17 27/32d.	17 25/32d.	17 23/32d.	17 25/32d.	17 25/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending March 13, 1926	January 1 to March 13, 1926	January 1 to March 13, 1925
(A) TEA (WEEKS ENDING MARCH 13 & 20, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamalais—			N. India.	1 9.68	1 9.37	1 7.33
Karakundru ...	98	1 11	S. India	a1 9.75	b1 9.75	c1 6.81
Pachamalai ...	43	1 9 ³ / ₄	Ceylon...	1 10.39	1 10.28	1 8.43
Selaliparai ...	88	1 9 ¹ / ₂	Java ...	1 5.41	1 5.71	1 2.20
(b) Central Travancore.			Sumatra.	Nil.	1 7.55	1 5.19
Thungamallay ...	97	1 9 ¹ / ₄	Nyassa-land.	1 6.67	1 7.04	1 4.82
Glenmary ...	112	1 9				
Pirmed ...	214	1 8 ³ / ₄	Total ...	d1 9.47	e1 9.39	f1 7.13
Pasumalai ...	95	1 7 ¹ / ₂				
(c) Kanan Devans—			District	Week ending March 20, 1926	January 1 to March 20, 1926	January 1 to March 20, 1925
Gundumallay ...	85	1 11 ³ / ₄				
Chockanad ...	227	1 11 ¹ / ₂				
Kalaar ...	172	1 11				
Manaar ...	170	1 10 ³ / ₄				
(d) Niligiri-Wynaad—						
Devarashola ...	83	1 9 ³ / ₄				
(e) Wynaad—						
Elstone ...	78	1 8 ¹ / ₄				
Erramaculla ...	60	1 9				

(B) COFFEE

SPECIAL CABLE, LONDON, APRIL 14, 1926

'A' QUALITY 144s. MARKET STEADY

London Prices (seven days ending March 23, 1926)

	bgs.	s.	d.	* Quality.
(a) Coorg—				
Wudderhully...	38	129	9	1,2, P B & T.
Sidapur ...	38	129	7	All grades.
Yemmigoondi..	109	129	3	Do.
(b) Mysore—				
Santawerry ...	98	149	9	Do.
Do. ...	112	147	3	Do.
X. Q. ...	76	140	11	Do.
Baba boodan ...	54	141	10	Do.
(c) Niligiris—				
Mailoor ...	53	136	7	Do.
Adderley ...	56	136	0	Do.

	s.	d.	s.	d.	s.	d.
N. India.	1	9.50	1	9.39	1	7.13
S. India.	**1	10.49	††1	9.76	††1	6.59
Ceylon ...	1	10.91	1	10.32	1	8.26
Java ...	1	5.73	1	5.71	1	1.95
Sumatra.	1	9.86	1	7.86	1	4.68
Nyassa-land.	1	7.53	1	7.15	1	4.82
Total	*1	9.46	†1	9.40	†1	6.92

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, April 13, 1926, was 24¹/₂d.

a 2,527 d 66,155
b 44,795 e 771,155
c 38,993 f 558,383

** 1,461 * 70,624
†† 46,256 † 841,779
†† 42,527 † 601,565

(d) *Précis of reports on the London Market received on Monday, April 12, and covering the seven days ending Tuesday, March 23 :—*

(1) *Tea.*—The English Mail has brought us this week the London Tea Brokers' Reports for the weeks ending 13th and 20th of March; and consequently we are able once again to give average prices obtained in London for the week immediately preceding that during which the Mail was despatched. During the seven days under review demand slackened slightly and prices in sympathy showed an all round decline of from $\frac{1}{4}$ to $\frac{1}{2}d.$ per pound. The total exports from South India during January 1926 were 3,448,250 lbs. as against 4,945,204 lbs. during the corresponding period of 1925. The London Bonded Stocks on February 28, were 202,300,000 lbs. as against 231,157,000 lbs. and 186,998,000 lbs. respectively on the same dates in 1925 and 1924.

(2) *Rubber.*—During the week stocks decreased by 554 tons to 11,116 tons and the 'spot' price remained fairly steady at about $2/6\frac{1}{2}d.$ or $1d.$ above the price which obtained during the preceding seven days. During February 30,440 tons were shipped from Singapore as against 30,452 tons in January; which seems to show that The Straits were unable to take immediate advantage of the additional 15 per cent release sanctioned from 1/2/1926 under the Restriction Scheme.

(3) *Coffee.*—Mysore proved rather attractive and, as indicated on the previous page, prices remained slightly firmer than those which obtained during the preceding week.

III. Weekly Rainfall Statement

From Sunday, April 4, 1926, to Saturday, April 10, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	0.96	...	0.96	19. Coonoor ...	0.22	...	0.22
2. Kalthuritty	1.53	...	1.53	20. Kotagiri ...	0.40	...	0.40
3. Tenmalai ...	1.07	...	1.07	21. Ootacamund	1.77	...	1.77
4. Mundakayam.	1.53	...	1.53	22. Yercaud ...	1.26	...	1.26
5. Peermade ...	1.21	...	1.21	23. Devala ...	0.55	...	0.55
6. Twyford ...	1.24	...	1.24	24. Gudalur ...	0.97	...	0.97
7. V'periyar ...	0.69	...	0.69	25. CALICUT ...	...	...	...
8. Kalaar ...	1.66	...	1.66	26. Kuttiyadi ...	N.R.	...	N.R.
9. Chittuvurrai	2.16	...	2.16	27. Vayittiri ...	0.20	...	0.20
10. BODI'KANUR	0.35	...	0.35	28. Manantoddi.	...	...	...
11. COCHIN ...	1.12	...	1.12	29. Billigiris ...	0.56	...	0.56
12. MooplyValley	0.38	...	0.38	30. Sidapur ...	0.06	...	0.06
13. Pachaimalai	N.R.	...	N.R.	31. Pollibetta...	...	...	...
14. Mudis ...	1.27	...	1.27	32. Somwarpett	N.R.	...	N.R.
15. POLLACHIE.	2.31	...	2.31	33. Ballupete ...	N.R.	...	N.R.
16. Manjeri ...	1.01	...	1.01	34. MANGALORE.	...	...	...
17. Nilambur ...	N.R.	...	N.R.	35. MADRAS ...	...	...	...
18. Naduvattam	0.35	...	0.35				

W = During the week.

P = Previously.

N. R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 17] SAT., APRIL 24, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	267	District Association Meetings—	
The Pykara Project ...	268	Nelliampathy ...	276
The Spraying of Rubber ...	270	Coorg ...	277
The General Scientific Officer's		Nilgiri-Wynaad ...	279
Monthly Report ...	274	Shevaroy Notes ...	281
District Representatives,		Commercial and Meteorolo-	
U. P. A. S. C. ...	276	gical ...	283

EDITORIAL NOTES

Dr. W. S. Shaw, Tea Specialist to the U. P. A. S. I., arrived in Madras on Sunday morning accompanied by his bride. We are sure we will have all our Readers with us in wishing them a very long and happy married life. We were interested to learn that Mrs. Shaw is, like her husband, a Science Graduate ; as we see the happiest augury for their joint future in such a marked affinity of intellectual tastes. Some of our readers will soon be able to extend personally to Dr. Shaw the welcome which here offer him on behalf of the Association in general and Tea Planters in particular ; as he proposes immediately to make a tour of the Tea Districts in the company of Mr. D. G. Munro.

Elsewhere in this issue appear the Minutes of a Meeting held to resuscitate the Nelliampathy District Planters' Association which joined the U. P. A. S. I. on its inauguration on September 3, 1894, and was regularly represented at the Annual Meetings thereof up to and including that held at Bangalore in August 1903. We congratulate the seven gentlemen who were either present or represented at this inaugural—or perhaps we should rather say re-inaugural—meeting, and hope that the new lease of life which the Nelliampathy Association is obtaining through their efforts will be one of unchequered success.

Mr. Herbert Ashplant, A.R.C.S., has compiled for this issue an interesting contribution on *The Spraying of Rubber* which it goes without saying will be welcomed by Rubber Planters as containing a further instalment of the useful advice and practical guidance which they have learnt to expect from his pen.

In supplementation of our article on 'The Rubber Prospect' which appeared on page 223 of our issue of April 3, we now give, as of possible interest Messrs. Symington and Sinclair's details of the Actual Production and Consumption of Rubber during 1924-25 and of the Estimated Supply and Demand for 1926:—

WORLD'S PRODUCTION AND CONSUMPTION						
Production				1924 Tons	1925 Tons	1926* Tons
Malaya	...	...	...	165,000	198,000	283,000
Ceylon	...	...	...	37,000	42,000	64,000
Dutch East Indies	...	...	...	162,000	190,000	199,500
Other Plantation	...	...	...	26,500	33,000	37,000
Brazil	...	...	...	23,500	28,500	32,500
Wild	...	...	...	6,000	8,500	10,000
Total				420,000	500,000	626,000
Consumption				1924 Tons	1925 Tons	1926* Tons
U.S.A.	...	...	...	335,000	386,000	415,000
U. K.	...	...	...	27,000	30,000	33,000
France	...	...	...	35,000	36,000	37,500
Germany	...	...	...	22,500	37,000	45,000
Canada	...	...	...	14,500	17,000	20,000
Italy	...	...	...	8,700	11,000	12,000
Japan	...	...	...	17,000	13,000	15,000
Russia	...	...	...	2,000	9,000	12,000
Others	...	...	...	13,300	13,000	13,500
Total				475,000	552,000	603,000

* The figures for 1926, both for production and consumption are estimated after most careful consideration.

THE PYKARA HYDRO-ELECTRIC SCHEME

On Monday of this week His Excellency the Governor of Madras performed the inauguration ceremony of the Pykara Hydro-electric Project which is designed to provide cheap electric power in bulk not only to Ootacamund, Coonoor, Wellington and Aravankadu on the Nilgiris but also to places as far a field as Madras to the North and Madura to the South. We trust that a proportion of our Readers will eventually find outward and visible signs of the successful completion of the Scheme in their own Factories in the shape of increased efficiency and reduced running costs. But even those, who are not fortunate enough to be so directly affected, will agree that the day which saw the launching of this gigantic hydro-electric undertaking will be for ever a Red Letter Day in the annals of Industry in the Presidency of Madras. Moving about on their lawful occasions, they will find themselves continually benefitting from the amenities afforded by the Scheme. The jaded worker in the Plains for example as on holiday bent he whisks his way to the Nilgiri Health resorts will, even before arrival at his destination, possibly experience a foretaste of those amenities as he travels say from Villupuram to Madras or from Madura to Trichinopoly on trains actuated by electricity instead of steam.

The power will be obtained from the waterfall of 3,088 feet where the river Pykara falls from the Nilgiri plateau to the Plains near the Mysore

border at a point fourteen miles from Ootacamund. A dam 164 feet high will impound a dry season reserve supply of 3,826,000,000 cubic feet of water with a surface area of $2\frac{1}{2}$ square miles; and the necessary water will be conveyed through sluice outlets to a low masonry weir three miles below the dam and thence *via* a flume 5,220 feet long to a forebay, with a capacity of 86,000,000 cubic feet which will be constructed by closing the two ends of a natural valley near Glen Morgan Estate with earthen bunds. From this forebay the water will fall through a penstock to the Generating Station below.

The turbines will develop 54,000 brake horse power and the generating plant 37,200 kilowatts; which, as the maximum demands of all consumers do not occur simultaneously, should suffice to cover a connected load at the power house of 44,640 kilowatts. The power available will amount to 116,000,000 kilowatt hours or units per annum.

The main transmission line will be carried uphill from the Power Station to Ootacamund and Wellington and then down the ghat to Mettupalayam where it will bifurcate; one line proceeding *via* Coimbatore and Pollachie to Dindigul with branches to Trichinopoly and Madura; and the other direct across country to Salem and thence *via* Attur and Villupuram to Madras. The cost of the Pykara Scheme proper is estimated at Rs. 2,47,78,600; but an ingenious subsidiary project which will enable the water which has actuated the turbines at the Pykara Power House to be re-utilized by conveying it to an auxillary plant on the Moyar river will increase the total cost of the undertaking by Rs. 25, 81,400 to Rs. 2,73,60,000.

Estimates for further hydro-electric undertakings at Pinjikav and Kumbar in the vicinity of Kodaikanal and at Papanasam in the Tinnevely District are already in an advanced stage of preparation; so that it is no exaggeration to say that when the plans of the Hon. Sir C. P. Ramaswamy Iyer, Mr. Percy Hawkins and Messrs. Merz and Maclellan, the Consulting Engineers, have fully materialized the industrial outlook in the Madras Presidency will be completely changed.

A most satisfactory feature of this epoch-making venture is the breath of vision displayed by all connected with the Scheme. To quote but one example, the Forest Department has effected a survey for the construction of a 22 miles metre gauge railway which will transport the Eta Bamboo (*Ochlandra*) from its Reserves to the Paper Factory which it is proposed to construct as soon as power is available from the Papanasam Falls. That the possibilities of this proposal are by no means chimerical must be patent to all who have seen the recently published Volumes of the Madras Forest Department's Annual Report for 1924-25 which have been printed on most excellent paper manufactured from the Eta Bamboo of the Tinnevely Ghats.

Space precludes us from referring in detail to other of the almost inestimable possibilities of these Hydro-electric projects; but a moment's thought will enable even the layman to conjure up for himself visions of the fertilization of presently barren tracks through the tapping of underground sources of water supply by electrically driven pumps, of an unprecedented stimulus to Technical Manufacture generally, and of striking metamorphoses in the now severely delimited Cottage Industries of the Presidency of Madras.

CIRCULARS OF THE RUBBER SPECIALIST

No. 1:—THE SPRAYING OF RUBBER

BY

HERBERT ASHPLANT, A. R. C. S., RUBBER
SPECIALIST, U.P.A.S.I.

A. ARMADA SPRAY GUN

One of the drawbacks of the present spraying Lances and Nozzles is that the type of spray—whether a diffused mist for short distances or a coarse jet which carries two or three times as far—can be varied only by turning the end of nozzle or by changing the nozzle. The time taken to pull down a 12 or 15 feet Lance and effect this change is appreciable, and since the spray has frequently to be varied several times for each tree, a serious loss of time results from the drawback mentioned.

American Spraying engineers tried to get over the difficulty by the construction of what they call a 'Spray Gun.' The term 'Spray Gun' is a misnomer, the appliances being really only a special combination of lance and nozzle embodying a device that allows of the quality of the spray being varied by turning a handle near the operator instead of the nozzle itself. Great claims were made for this gun, but trials made in South India showed it to be useless for the spraying of rubber. The chief defect was that the appliance was too short, and that it was impossible to lengthen it. The gun only measured about two feet, and in practice the distance reached by its highest sprays fell far short of that attainable with the ordinary spray lances.

Last year Messrs. Drake and Fletcher, the British spraying engineers, devised an 'improved type of Spray Gun, the great advantage of which is that it can be made of any length. In this, as in the older pattern, all types of spray from a fine diffused mist to a coarse long distance jet can be got merely by turning a handle situated near the operator's hand.

The Armada Gun is made of a special light steel alloy, and as at present supplied is 8 feet long, the entire length being supported by encasement within a bamboo rod. A four foot extension piece with a separate nozzle is provided, and this can be readily attached. The length above mentioned, and the decision to add an extension was arrived at in trials made last Autumn by the inventor in conjunction with the writer, then in England. Unfortunately the right materials for making up the Spray Gun to its maximum length were not then at hand, and it was not then possible to determine once and for all the most satisfactory length for all purposes.

Several of the Armade Spray Guns have lately arrived in South India where they are in daily use. By most users the new Spray Gun is regarded as a very great aid in the spraying of rubber above four years of age, and it is gratifying to note that it is very popular with the spraying coolies. The writer is himself convinced that in this device Messrs. Drake and Fletcher have undoubtedly made a distinct advance in the spraying equipment for rubber. The only feature that calls for modification, so far as experience

shows at present, is the length. If reinforced with a lighter bamboo, the Spray Gun could with advantage be extended to ten feet. With regard to the 4 foot extension, owing to the excessive weight of the nozzle and connections, the Gun when used with extension fitted is too unwieldy to be easily manipulable, and it would therefore appear advisable, in future models, to dispense with the extension altogether, and make the Spray Gun itself two feet longer, as indicated.

One or two critics of the new Spray Gun have compared its range rather unfairly with that of the Solid Stream Nozzle, the coarser varieties of which, when used on a long lance, may still be said to give the longest distance spray. It is scarcely permissible to compare a coarse nozzle, designed for one purpose only, and inefficient for general work, with an appliance that can be made at will to give suitable sprays for all purposes, but even with a long distance spray, the new instrument runs the nozzle mentioned very closely. When, as appears feasible, the Spray Gun is lengthened by a couple of feet, its extreme range will at least equal that at the present long distance nozzle, and the objection raised will disappear.

Criticisms and suggestions for improvement in the present spraying apparatus are welcomed but to be useful they must take fully into account the special features that an efficient spraying instrument must possess. As there still seems to be some misconception among planters on the subject of sprays, the following note, supplementary to the circulars issued, may be of interest.

B. FINE SPRAYING *versus* COARSE SPRAYING

While the spraying of rubber trees cannot, with the present appliances, be carried out as perfectly as one would wish, and the spraying of large areas, necessarily, in view of the shortness of the season, must be pushed on without striving for the thoroughness possible on small areas it is a great mistake to go to the other extreme and sacrifice quality altogether to quantity.

Little delays occasioned by frequent alterations in the nozzle necessary to get the different types of spray, and the apparently more rapid work possible with the large bore nozzle has led many people to neglect the fine misty nozzle almost entirely for coarse jets. This is a retrograde tendency, contrary entirely to the lessons of experience and to the whole trend of modern spraying research, which, convinced of the greater efficiency of fog-like sprays, is constantly striving to produce appliances that will give finer and finer sprays. Granted that the use of coarse sprays is an occasional necessity it should not be made a habit, and within the range get-at-able with fine misty sprays, these should always be employed.

The belief that spraying with coarse jets is more rapid is really fallacious, as a few moments consideration of the problem will show: A pint of Bordeaux Mixture discharged through a coarse nozzle like the solid stream nozzle is broken up into a few thousand drops only. A similar quantity of mixture emerging from a mistifier nozzle, on the other hand, is shattered into hundreds of millions of drops, a large proportion of which are invisible, except in certain lights. The infinitesimal droplets of a fine foggy spray do

not merely hit the regions directly pointed at. They drift in under and between the foliage to just those points that require protection—points to which large drops, necessarily following a straight path, cannot possibly reach. Another advantage of an ultra-fine spray is that the droplets have not sufficient weight to make them fall off, and on a sunny day a very high percentage manage to dry on the foliage before they can run together and make 'drip.' Contrast with this what happens to the larger drops of coarse sprays: These are in general so heavy that the influence of gravity upon them more than counter balances that of surface tension, and they readily run off the foliage. Any one who stands under two rubber trees, one of which is being sprayed with a coarse and the other with a misty spray, can see this for himself. While most of the fine spray remains on the foliage, and there is little drip, the drip from a coarsely sprayed tree is tremendous. Frequently more than half the Bordeaux Mixture applied does not remain on the foliage at all. To some extent the comparison is similar to that between a rifle and a modern machine gun, only in the case of the misty *versus* a coarse spray, the chances of the misty spray hitting the target are immensely greater, compared with the other, than those possessed by the machine gun over the rifle.

It is desirable to bear the foregoing in mind when criticizing nozzles, etc., and particularly when comparing the daily spraying tasks accomplished on different estates. Some people, using a fine nozzle wherever possible, are spraying from 130 to 160 trees per day per machine, and spraying them well. Others, though claiming to be spraying 50 per cent. more trees, would actually, if the matter were investigated, be found to be only protecting 25 per cent. of the area of foliage, protected by the first mentioned sprayings.

The task coverable varies, of course, with the ages of trees and other conditions, and the figures quoted should not be taken as standards. The question of task is only brought up here to emphasize the need for considering the quality of the spraying when making appraisements. So far as the writer's experience goes, the size of the task covered is not uncommonly in inverse ratio to the quality of the work done.

C. FORMIC ACID AS A COAGULANT

In the early days of the plantation rubber industry Formic Acid was extensively tried as a coagulant for rubber latex. Although quite satisfactory for this purpose, the Formic Acid available in the East was at that time slightly more expensive than Acetic Acid, and owing to this, and probably also to the pressing need for uniformity in the methods of rubber preparation it was ousted from the field by the latter Acid. Formic Acid has lately reappeared on the Eastern market, and at present quotations its cost works out at about 50 per cent. cheaper than Acetic Acid, when the relative coagulating values of the two acids are compared.

Various investigations, both in the East and at Home have clearly proved that Formic Acid has no ill-effects on the vulcanizing properties of rubber, while trials made in Ceylon last year by the Chemist of the Rubber Research Scheme confirmed Eaton's conclusions that sheet and crepe

coagulated with Formic Acid are equal in appearance and in every other respect to rubber coagulated with Acetic Acid. Indeed rubber coagulated with Formic Acid is stated to be lighter in colour than Acetic Acid coagulated samples. Rubber planters need hesitate no longer therefore in substituting Formic Acid for Acetic Acid, and taking advantage of the economies offered.

Formic Acid is sold in strengths of from 80 to 90 per cent. One part by volume of the 90 per cent. Acid is equal in coagulating power to two parts by volume of the ordinary undiluted Acetic Acid. Vendors of Formic Acid should be required to specify the strength of the Acid supplied, and they should see to it that its constancy is certified by the manufacturers. The percentage strength of Formic Acid can only be determined with accuracy by chemical analysis, but it appears from the investigations of the Ceylon Rubber Research Scheme that Hydrometers can be devised that will make possible a rapid estimate of its strength, correct to within an error of two or three per cent. As the density of Formic Acid varies with the temperature, it will always be necessary, when making hydrometer tests to compare the sample with a standard sample of Formic Acid of which the percentage strength is known.

In view of the probable general adoption of Formic Acid as a latex coagulant, the following additional information may be of interest.

Formic Acid is the irritant fluid to which the common red ant of rubber plantation owes its unpleasantness. In the bee, the sting nettle, and other living organisms, this acid is also met with. At one time the distillation of ants, bees, etc. with water was the one source of supply of Formic Acid. For many years Formic Acid has been prepared from Glycerine and Oxalic Acid, but shortly before the war, cheaper methods of preparation were discovered, one of which being by the action of Carbon Monoxide (water gas) on powdered Caustic Soda. The formate of soda obtained in this way, when heated with Sulphuric Acid, gives off Formic Acid. Formic, like Acetic Acid, is what is known as an organic Acid, the elements entering into its composition being Carbon, Hydrogen and Oxygen (CH_2O_2). Pure Formic Acid is a colourless hygroscopic liquid with a pungent odour. Its specific gravity is 1.223 at 0°C . and its boiling point 99°C . (The specific gravity of pure Acetic Acid at 0°C is 1.08). Since Formic Acid, when dropped on to the skin, produces painful blisters like those resulting from the stings of nettles, greater care in using is called for than has been usual with Acetic.

The 'Chemical Age' of March 13, 1926, quotes Formic Acid of 85 per cent. strength at £49, per ton ex store. Acetic Acid 98 to 100 per cent. strength was quoted at £55 to £67 on the same date. When comparing prices, allowance must be made for the fact that a ton of Formic Acid contains fewer gallons than a ton of Acetic Acid, Formic Acid being considerably heavier. Prices are always quoted for avoirdupois, while statements of the coagulating power of the two acids invariably compare volumes.

MONTHLY REPORT
OF THE
GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.
FOR
MARCH 1926

During the month under report I was on tour in the Peermade District from 7th to 24th, and in the Nelliampathies from the 27th till the 29th. The remainder of the month was spent at Head-quarters.

In Central Travancore two years ago earlier pruning was recommended as a preventive for branch canker on an estate which suffered seriously from it. No pruning is now being done there in the dry weather period with good results. Where *Helopeltis* is present early pruning is not recommended; as the bug gets on to the young shoots in the end of September and October and November, and the bush may receive such a shock that it may not recover for a whole year. Where branch canker is present in these cases, the only remedy is to spray with lime sulphur and gradually replace the older cankered branches with younger ones from the collar as they appear.

In Red Gum fuel clearings it was found that many young plants were going out. Dead bushes were examined; and it was thought that root disease was the main cause, and white ants appeared later to clear away the dead wood. Further observations in the nursery and the field showed that white ants was a primary cause, and plants were obtained which showed signs of damage by white ants but no trace of root disease. Small colonies of white ants were found under practically every dead bush, but only by careful operation with a mamooty were they discovered.

Direct action will have to be taken against the ants, or else a different variety of fuel tree will have to be grown.

A species of green beetle, *Mimela Mundissima* Wlk. was found attacking the red gum leaves. They belong to the class of Rose Chafer. The grubs are like cock-chaffer grubs and do similar damage.

Coffee Experiment Station, Sidapur.—No rain fell during the month and the weather was very hot and dry. The soil is hardening up and young plants are suffering from lack of moisture. In the older coffee plots those receiving compost and all round artificials are looking fairly well. Incomplete manured plots have lost a large proportion of their leaves, while the sprayed plots look very fit.

Spike is plentiful and well developed, and with timely rains in sufficient quantity a good crop should be obtained. Seven plants are being self-fertilized this year. By arrangement with the General Manager of the Consolidated Coffee Estates, Ltd., the crop from these will be harvested separately half the seed going to the Estate and half to the Mysore Experiment Station.

Tea Experiment Station, Peermade.—2.63 inches of rain were recorded, distributed over 7 days. After this fall of rain the tea came away well and supplies have improved.

Spraying with Vermisapon against the *Helopeltis* on small plots of China tea gave the following results. Percentage of attack was found by

taking several hundred tips and counting the ones bitten as against those free :—

Dates plucked.	Sprayed			Unsprayed		
	Yield in		Percentage of Attack	Yield in		Percentage of Attack.
	lbs.	oz.		lbs.	oz.	
24-2-1926.	2	14	15%	1	6	40 %
5-3-1926.	2	8	28%	1	4	58 %
13-3-1926.	2	0	20%	2	0	38 %
25-3-1926.	3	0	16%	2	6	25 %

A number of planters visited the station on the 24th and various experiments were shown and explained.

Rubber Experiment Station, Mooply.—The weather was hot and dry and only .57 in. of rain fell. Normal wintering is over and the trees look very fit.

45 lbs. 10 oz. wet sheet and 9 lbs. 15 oz. wet scrap were harvested. The yields are shown below :

Plots.	No. of days tapped	No. of trees tapped	Particulars	Wet sheet per plot		Wet scrap per plot		Wet rubber per 100 trees per tapping	
				lbs.	oz.	lbs.	oz.		
16	27	58	Daily tapping. 1/3 section rested in July and August.	23	7.5	4	0.2	1.75	14.6
23	31	50	Daily tapping. 1/4 section. Deep cut.	11	15.5	2	8.2	0.93	17.3
...	Some trees.	...	Do. do. shallow cut.	2	4.0	1	6.0	0.23	37.1
23a	16	46	Alternate day tapping. Deep cut.	6	12.5	1	5.0	1.10	16.2
...	Some trees.	..	Do. do. shallow cut.	1	2.5	0	11.6	0.26	38.5
Total ...				45	10.0	9	15.0		

Rubber Experiment Station, Tenmalai.—5.69 inches of rain distributed over 9 days were recorded. Tapping in the manurial series, spraying and tapping series was started on March 3.

COIMBATORE,
April 12, 1926.

D. G. MUNRO,
General Scientific Officer
U.P.A.S.I.

THE U. P. A. S. I., SPORTS CLUB

District Representatives, 1926-27

CENTRAL TRAVANCORE.—Mr. G. P. Farley, Tungamally Estate, Vandiperiyar P. O.

SOUTH TRAVANCORE.—Mr. A. P. D. Lodge, Isfield Estate, Kalthuritty P. O.

MUNDAKAYAM.—Mr. H. B. Macpherson, Kokayar Estate, Munda-kayam P. O.

WEST COAST.—Mr. C. E. M. Browne, Chemoni Valley Estate, Palapilly P. O.

COORG.—Mr. J. S. H. Morgan, Greenfields Estate, Sidapur P. O.

ANAMALAIS.—Mr. C. Wynell Mayow, Monica Estate, Valparai P. O. *via* Pollachi.

NILGIRIS.—Mr. A. K. Weld Downing, Frith Hall Estate, Hulical P. O.

NILGIRI-WYNAAD.—Mr. G. W. Fulcher, Woodbriar Estate, Devar-shola P. O.

WYNAAD.—Mr. B. M. Behr, Audetode Estate, Perindotty P. O., Malabar.

KANAN DEVANS.—Mr. J. S. Hawkins, Nettigudi Estate, Mattupatti P. O. *via* Periakulam.

MYSORE.—Mr. H. H. English, Kurkenmutter Estate, Santaveri P. O., South Mysore.

SHEVAROYS.—The Honorary Secretary, Shevaroys Planters' Association, Yercaud P. O.

DEVARASHOLA,
April 13, 1926.

G. W. FULCHER,
Honorary Secretary.

DISTRICT ASSOCIATION MEETINGS

A. NELLIAMPATHY PLANTERS' ASSOCIATION

Inaugural Meeting

Present

Messrs. H. D. Chaldecott, Arthur Hall, and A. P. Kinloch; and, by proxy, Messrs. H. M. Hall, J. W. Stevenage, H. A. Boas and A. C. White.

1. The above named in meeting assembled do agree to form an Association to be called the Nelliampathy Planters' Association, to be incorporated with the U.P.A.S.I. under similar rules to the Anamalai Planters' Association, with due regard to local conditions.

2. The following Office Bearers were elected:—

Chairman ... H. D. Chaldecott, Esq.

Honorary Secretary ... A. P. Kinloch, Esq.

The Committee to be composed of five members including Office Bearers: three of whom shall form a quorum.

The following members were elected to the Committee:—

Messrs. J. W. Stevenage, H. A. Boas and Arthur Hall.

3. For the current year it was decided that the personal subscription be Rs. 5.

4. It was proposed by Mr. Hall and seconded by Mr. Chaldecott that the Honorary Secretary be asked to approach the Anamalai Planters' Association with a view to subscribing estates being allowed to secede from the Anamalai Planters' Association.

Carried.

5. Proposed by Mr. Hall and seconded by Mr. Chaldecott that the cost of incorporation to the U.P.A.S.I. be borne in proportion to their cultivated acreage by all subscribing estates; and that any estate joining hereafter shall pay a sum of one anna per cultivated acre as a share of incorporation charges.

Carried.

6. Proposed by Mr. Kinloch and seconded by Mr. Hall that all members personal or otherwise send in a signed statement of their planted acreage to the Honorary Secretary before May 1, 1926.

Carried.

7. Proposed by Mr. Chaldecott and seconded by Mr. Kinloch that the annual acreage subscription to the Nelliampathy Planters' Association be two annas per cultivated acre payable in advance.

Carried.

8. Proposed by Mr. Hall and seconded by Mr. Kinloch that the Honorary Secretary be asked to write to the Mercantile Stationery Syndicate, Calcutta, for a design and estimate of a seal to consist of a black panther's head surmounted by a scroll with the words 'Nelliampathy Planters' Association.'

Carried.

9. Proposed by Mr. Hall and seconded by Mr. Kinloch that the Honorary Secretary be instructed to call a General Meeting at Kottangadi Bungalow at 1 p.m. on Sunday, May 9, 1926, for the purpose of confirming the meeting and the dependent rules thereof.

Carried.

10. Proposed by Mr. Hall a hearty vote of thanks to Mr. Kinloch for the use of his *Bungalow for the inaugural meeting of the Nelliampathy Planters' Association.

A. P. KINLOCH,
Honorary Secretary.

H. D. CHALDECOTT,
Chairman.

(* N.B.—Our Correspondent has inadvertently omitted to mention the date on which this inaugural meeting was held. *Ed.*)

B. COORG PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of an Extraordinary General Meeting held at the North Coorg Club, Mercara, on Monday March 29th, at 10-30 a.m.

Present

Messrs. P. G. Tipping (*Chairman*), W. E. Dickinson, C. A. Reid, J. H. Sprott, W. G. L. Parsons, F. Macrae, J. B. Reid, R. P. W. Potter, R. B. Cunningham, N. R. Lee, W. R. Wright, E. M. Gray, J. Hume, D. C. Mahon and A. F. Magniac (*Honorary Secretary*).

Visitor

Mr. A. Dunning.

The Honorary Secretary announced the result of the ballot for election of Chairman, in place of Mr. L. Newcome, resigned, which was in favour of

Mr. Tipping. Mr. Tipping having thanked the Members for re-electing him, took the Chair.

The Honorary Secretary read the notice calling the Meeting.

The Report of the Labour Control Committee Member for Mysore having been previously circulated, was discussed. There was nothing of interest to this Association in the Mangalore Division Control Committee Meeting at Ootacamund. A vote of thanks to Messrs. J. B. Reid, and W. R. Wright was passed for having represented this Association at these Meetings.

Labour Department, European Employee's Terms.—There was considerable discussion on these terms, as also on the Indian Employee's Provident Fund Rules, but it was found impossible to carefully consider such lengthy documents in the time allowed and the following resolution proposed by Mr. J. B. Reid and seconded by Mr. R. B. Cunningham, was put to the Meeting, and carried unanimously :—

‘That this Association is strongly opposed to the European Employees’ terms and the Indian Employees’ Provident Fund Rules, being rushed through without time being allowed to fully consider the whole matter. That both proposals be printed and circulated to every member of the U.P.A.S.I. and the matter put on the Agenda of the August Bangalore Meeting for final decision.’

Stephanadores.—Letter from the Secretary, U.P.A.S.I., was read to the Meeting. After some discussion, the following resolution from the Chair was put to the Meeting, and carried unanimously :—

‘That this Association requests that the danger likely to arise from the importation of coffee beans, whether in the form of seed or otherwise, without disinfection, owing to the prevalence of this disease in foreign countries, shall be strongly represented to Dr. Clouston, whilst in Madras, and considers we run very grave risks through the unnecessary delay in adopting measures for our protection’.

Coorg Labour Bill.—A discussion took place as to the form of agreements to be made under the new Coorg Labour Act.

Proposed by Mr. F. Macrae, and seconded by Mr. Parsons, ‘That this Association now appoints a Sub-Committee of three, with the Chairman ex-officio, and invite the Coorg Landholders’ Association to co-operate with a similar Sub-Committee, with a view to their drafting some form of agreement, which will conform with the terms of the new Labour Act, and obtain legal opinion on the same, and which may be presented to the Members of this Association at the next General Meeting. It is hoped this will be taken in hand by the Sub-Committee, as soon as the Act in its final form has been published. Carried unanimously.

The following Members were elected as Sub-Committee :—Messrs. Macrae, Dickinson, and J. B. Reid. Mr. Tipping (*Chairman*) ex-officio.

A letter from the Commissioner of Coorg was read, enquiring names and designations of persons, whom it will be necessary to empower as Attesting Officers, outside Coorg. The Honorary Secretary was instructed to write the Superintendents of the Labour Department Divisions of Managalore, Mysore and Coimbatore, and to inform the Commissioner that this was being done.

Coorg Mails.—This matter was again brought up, and the Honorary Secretary was instructed to write to the Commissioner, that the position as regards delivery had not improved.

Coast Cartmen, and Non-Delivery of Uploads.—The Honorary Secretary read letter from Mr. L. Newcome on this subject, quoting several instances of non-delivery of manures, and tampering with manure on journeys from Coast.

Resolved that the Mysore Planters' Association be approached, and their views on the matter obtained.

A hearty vote of thanks was passed by the Meeting to Messrs. L. Newcome, and A. E. J. Nicolls for their valuable services as Council Members, and for all the work they had put in on behalf of the Association.

With a vote of thanks to the Chair, and the Honorary Secretary, the Meeting then terminated.

A. F. MAGNIAC,
Honorary Secretary.

P. G. TIPPING,
Chairman.

C. NILGIRI-WYNAAD PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of an Extraordinary General Meeting of above Association held at
Gudalur on March 29, 1926, at 11 a.m.

Present

P. A. Naylor, Esq. (*Chairman*), Messrs. J. Aird, J. C. Blackham, R. M. Nicolls, R. Fowke, J. C. Nicolls, M. J. Wright, W. K. Baillie, G. W. Fulcher, J. W. G. Bissett, E. F. Farmer, and D. Mackintosh (*Honorary Secretary*).

Before the business of the Meeting started our *Chairman* proposed a vote of condolence with Mrs. Cooper, on the death of her husband, this was passed in silence, all Members standing. The Honorary Secretary was instructed to convey the Association's sympathy to Mrs. Cooper.

Alteration of the Articles of Association.—The following alterations proposed by Mr. G. W. Fulcher, and seconded by Mr. D. Mackintosh was carried unanimously.

Resolved.—That the Articles of Association be altered in Manner following :—

'That in Article No. 7, the words 'Rupees Five' shall be substituted for the words 'Rupees Twelve.'

D. MACKINTOSH,
Honorary Secretary.

P. A. NAYLOR,
Chairman.

D. NILGIRI-WYNAAD PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of a General Meeting of the above Association held at Gudalur on Monday
March 29, 1926, at 11.30 a.m.

Present

P. A. Naylor, Esq. (*Chairman*), Messrs. J. Aird, J. C. Blackham, R. M. Nicolls, R. Fowke, J. C. Nicolls, M. J. Wright, W. K. Baillie, G. W. Fulcher, J. W. G. Bissett, E. F. Farmer, and D. Mackintosh, (*Honorary Secretary*).

THE PROCEEDINGS OF THE LAST MEETING HAVING BEEN PUBLISHED
IN THE 'PLANTERS' CHRONICLE', WERE TAKEN AS READ AND
CONFIRMED.

Labour Department. Terms of Employment of European Employees.—This matter was discussed and it was decided to leave it over till the next Meeting. Meanwhile, it was decided to furnish each Member with a copy of Major Brock's Circular. Mr. R. M. Nicolls kindly promised to get the necessary copies stylographed, which was much appreciated by the Meeting.

European Employees' Provident Fund.—The Honorary Secretary was instructed to apply for more copies to circulate to Members and bring the matter up at the next Meeting.

Indian Employees' Provident Fund.—This Association sympathizes with this scheme in general on conditions that no further increase in the U.P.A.S.I. Subsidy, be called for in the future, and is of the opinion that charges on the fund be borne by each Labour Division concerned.

It was also recommended that an Employee joining the U. P. A. S. I. on a salary under Rs. 20 per month and his remuneration being increased after a period of years to Rs. 20 or over, that the date of his becoming a Member of the Provident Fund should not be retrospective, and that the date of his service should be calculated from the time that he becomes a contributing Member.

Nilgiri District Board.—Read District Board Engineer's letter No. R. C. 82/6.

Devala-Nellacotta Road. Nellacotta-Sultan's Battery Road. Meppadi.—(Cholody Bridge, Devala Section.)

The above were discussed and the Honorary Secretary was instructed to write to the Engineer on the Subject, also to enquire through the District Board President, from the P. W. D. when the Nadganni Ghaut Road will be opened for traffic.

Mysore Labour Control. Member-in-Waiting.—Our Member-in-Waiting Mr. G. W. Fulcher, after hearing the opinion of the Meeting, decided to withdraw his resignation.

Wynaad Re-Settlement Survey.—The Honorary Secretary was instructed to write to the Re-Settlement Office at Vytiri and ascertain, whether all the particulars concerning the re-survey, had arrived, also to write to the Settlement Officer, Trichinopoly, and find out if he could arrange to attend our next Meeting to be held on April 27.

Sports Club.—Mr. G. W. Fulcher exhibited the Club badges which were admired.

District Labour Rules.—Read letter from the Coorg Planters' Association and the Honorary Secretary was instructed to reply that the Members of this Association would not hold themselves responsible for the action of their Maistries.

Personal Member.—Mr. H. C. Scovell of Prospect Estate was proposed from the chair and unanimously elected.

Scientific Department. Rubber.—The U. P. A. S. I. Secretary's letter of March 12 last was read, and the Meeting decided to leave the matter in abeyance.

Act 13 of 1859 repealed.—Mr. R. Fowke explained what had recently taken place regarding this in Madras.

Auditor.—Read letter from Mr. K. V. Gopalaiyer, Coimbatore, applying for the work. The Honorary Secretary was instructed to find out Mr. Gopalaiyer's qualifications.

General.—The Honorary Secretary pointed out that correspondence was greatly increasing, and asked that the Association sanction him getting a Cyclostyle. This was agreed to.

With a vote of thanks to the Chair the Meeting terminated.

S. MACKINTOSH,
Honorary Secretary.

P. A. NAYLOR,
Chairman.

DISTRICT NOTES

Shevaroy Hills

There is very little to write about at present except Coffee, as the 'Season' has scarcely begun, though a good many visitors have arrived. The Yercaud Club gave an 'At Home' on the 8th inst. and there are rumours of two more shortly. Messrs. N. M. and C. L. Hight left for England on the 4th. Messrs. C. D. and F. Ryle left in the middle of last month and there were several departures earlier in the year so that the number of residents is at present very much below the usual strength. However I daresay we shall wake up later on.

Motor Service.—The Lorry which first started has now been fitted up with seats and a hood and does a good deal of business in passenger traffic, and as the charges are moderate it ought to make these Hills more popular. Motor vehicles have almost doubled in number within the last 12 months and the Members of the local Union Board are turning grey with worrying over the problem of keeping the roads in order as none of them are metalled. Not being a Municipality, no local taxes can be levied on Motors and with the traffic increasing so enormously, it seems a hopeless problem.

Coffee Blossom.—The first flowering occurred on March 19 and 20 but on the majority of estates it has been an exceedingly poor show. A few estates in and around Yercaud were visited with rather a severe hail storm in the evening on the open blossom but to our great surprise no visible harm was done. Some are living in hopes of a second blossom, but the spike is so small and in small clusters. Also a large percentage falls off if touched, so I do not think there is much cause to justify these hopes. Apparently the whole damage was done, as I then predicted, by the heavy rain at the end of January, which has made the undetermined bud run into flush and pushed forward the rest prematurely so that it is now burning off. This question however is one that might repay scientific investigation. Almost every season a certain quantity of the bud, while still very small, develops a brown ring round the point where the unopened petals join the embryo berry, even when the weather is not sufficiently dry to burn it and the trees are not dropping, in fact the brown ring is mostly noticeable after

heavy rain. This spike then drops off and the eye becomes 'blind'. Is this another fungus?

Coffea /Pina.—Green bug is now beginning to get a hold on the young flush in parts. Borer does not seem to be in as much evidence as it was last year.

Spraying.—The blossom on the fields which were sprayed with Bordeaux Mixture was a grand sight on both the estates where this work was undertaken. There is also a very fine second blossom coming out as a result of the recent rain, which is more than can be said about the unsprayed portions where the flowering will be very light and scattered. The result has certainly justified the expenditure and clearly proves that a coffee tree, which has retained its leaves, is not so ready to run into flush, or the eyes to turn blind, with untimely rains. There has not been a single instance of 'burning' or blind eyes. On one estate a small portion was sprayed with a weak solution of Sulphate of Iron and the blossom is reported to have been as fine on this as on the field sprayed with Bordeaux. This experiment is one however which cannot be undertaken with safety by an amateur as Sulphate of Iron is a poison to plant life and the leaves can get severely burnt if the solution is too strong. If however our Experimental Farm could prove its utility the cost of materials for spraying would be a fraction of the cost of Bordeaux.

Hills.—The Epidemic of Flu which I reported in January is dying very slowly as one still hears of a few isolated cases, but otherwise these Hills are remarkably healthy just now.

RAINFALL. Mrs. C. G. Lechler has kindly supplied me with the subjoined figures showing the Annual Rainfall on Brooklyn Estate for the past 46 years:—

Year	Inches	Year	Inches	Year	Inches	Year	Inches
1880	68-92	1892	49-37	1904	45-88	1916	71-63
1881	49-97	1893	63-34	1905	58-62	1917	61-2
1882	58-58	1894	57-44	1906	51-16	1918	58-47
1883	67-11	1895	63-79	1907	48-14	1919	62-56
1884	77-8	1896	58-25	1908	56-96	1920	64-97
1885	52-60	1897	47-44	1909	65-13	1921	52-40
1886	57-22	1898	78-41	1910	73-75	1922	60-16
1887	60-1	1899	41-24	1911	51-00	1923	36-90
1888	52-63	1900	54-59	1912	57-86	1924	36-74
1889	53-57	1901	55-36	1913	52-75	1925	52-17
1890	55-19	1902	71-94	1914	60-32		
1891	46-12	1903	78-81	1915	61-19		

YERCAUD.

B. H. A. T. D.

April 15, 1916.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending April 17, 1926

Bank Selling Demand Draft on London

12th	13th	14th	15th	16th	17th
17 25/32d.	Holiday.	Holiday.	17 27/32d.	17 27/32d.	17 27/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending March 27, 1926	January 1 to March 27, 1926	January 1 to March 27, 1925
(A) TEA (WEEK ENDING MARCH 27, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamalai:—			N. India.	1 9.17	1 9.37	1 6.99
Sholayar ...	140	1 10½	S. India	**1 9.39	††1 9.75	††1 6.45
Periakaramalai ...	286	1 9½	Ceylon...	1 11.36	1 10.39	1 8.17
(b) Central Travancore.			Java ...	1 5.67	1 5.70	1 1.82
Kolie Kanum ...	113	1 9½	Sumatra.	Nil.	1 7.87	1 4.67
Cheenthalaar ...	77	1 9½	Nyassa-	1 6.78	1 7.10	1 4.82
Karim Tharuvi ...	104	1 9¼	land.			
(c) Kanan Devans—			Total ...	*1 9.40	†1 9.40	†1 6.84
Yellapatty ...	113	1 11½				
Periavurai ...	204	1 10½				
Letchmi ...	116	1 10½				
(d) Mundakayam—						
Yendayar ...	164	1 8½				
(e) Nilgiris—						
Prospect ...	186	2 2½				
Ibex Lodge ...	61	1 11				
Craigmore ...	133	1 9				
(f) Nilgiri-Wynaad—						
Woodbriar ...	97	1 9½				
Seaforth ...	76	1 9½				
Barwood ...	145	1 7½				
(g) South Travancore—						
Merchiston ...	66	1 8½				
(h) Wynaad—						
Fringford ...	38	1 9½				
Chulika ...	133	1 7½				

(B) COFFEE

SPECIAL CABLE, LONDON, APRIL 21, 1926

'A' QUALITY 143s. MARKET QUIET

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, April 20, 1926, was 23d.

** Based on 4,365 packages.

†† " " 50,621 "

‡‡ " " 46,022 "

* Based on 68,585 packages.

† " " 910,364 "

‡ " " 644,523 "

(d) *Précis of reports on the London Market received on Monday, April 19, and covering the seven days ending Tuesday, March 30 :—*

(1) *Tea.*—The sales on Wednesday the 24th ultimo—the first of the seven days under review here—evidenced a better tone than was apparent on the previous Monday ; and good liquoring teas from South India were in brisk demand though prices were somewhat easier for the lower grades. The exports from South India during January and February 1926 were respectively 3,448,250 and 2,025,217 lbs. as against 4,945,204 and 2,904,843 lbs. for the corresponding period of 1925. At the request of the Tea Buyers' Association, the Indian Association agreed to hold a small sale on Monday the 29th ultimo and the prices fetched thereat by the 295 packages of Southern Indians which were sold will be shown in our Commercial Pages next week.

(2) *Rubber.*—During the week under review 'spot' price showed a further fall of 2d. and the quotation on the 30th ultimo was 2s. 4½d.

(3) *Coffee.*—As the public auctions are suspended on account of the Easter Holidays until Tuesday April 13, the market is naturally quiet ; but we understand that a certain amount of East Indians has changed hands privately at quite satisfactory prices ; and there is every indication that the heavy consignments which should be on offer after the vacation will do equally well owing to improved enquiries on the Buyers' part.

III. Weekly Rainfall Statement

From Sunday, April 4, 1926, to Saturday, April 17, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	...	0·96	0·96	19. Coonoor ...	...	0·22	0·22
2. Kalthuritty ...	...	1·53	1·53	20. Kotagiri ...	0·03	0·40	0·43
3. Tenmalai ...	...	1·07	1·07	21. Ootacamund ...	0·03	1·77	1·80
4. Mundakayam.	N.R.	1·53	N.R.	22. Yercaud ...	N.R.	1·26	N.R.
5. Peermade ...	N.R.	1·21	N.R.	23. Devala ...	...	0·55	0·55
6. Twyford ...	N.R.	1·24	N.R.	24. Gudalur ...	0·22	0·97	1·19
7. V'periyar ...	0·66	0·69	1·35	25. CALICUT ...	...	...	...
8. Kalaar ...	0·04	1·66	1·70	26. Kuttiyadi ...	...	...	...
9. Chittuvurrai ...	...	2·16	2·16	27. Vayittiri ...	...	0·20	0·20
10. BODI'KANUR	...	0·35	0·35	28. Manantoddi.	N.R.	...	N.R.
11. COCHIN ...	...	1·12	1·12	29. Billigiris ...	1·20	0·56	1·76
12. MooplyValley	...	0·38	0·38	30. Sidapur ...	N.R.	0·06	N.R.
13. Pachaimalai	1·41	1·87	3·28	31. Pollibetta...	...	...	...
14. Mudis ...	0·85	1·27	2·12	32. Somwarpett	...	...	...
15. POLLACHIE.	...	2·31	2·31	33. Ballupete ...	N.R.	N.R.	N.R.
16. Manjeri ...	N.R.	0·01	N.R.	34. MANGALORE.	...	...	...
17. Nilambur ...	...	...	...	35. MADRAS ...	0·10	...	0·10
18. Naduvattam	0·23	0·35	0·58				

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : **UPASI, Madras**

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 18] SAT., MAY 1, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	285	The Early History of the	
Notices—		Rubber Industry ...	292
The Labour Department ...	287	Nilgiri P. A. General Meeting.	296
The Scientific Department ...	287	Grassy Flavour in Coffee ...	295
The Rubber Prospect ...	288	Commercial and Meteorologi-	
Synthetic Farmyard Manure ...	291	cal	299

EDITORIAL NOTES

Under this head we reproduce on another page a review of the London Rubber Market by Messrs. Charles Hope and Son which incidentally estimates the 1926 Consumption at a figure within 2,000 tons of that—603,000 tons—which we suggested in our article on page 224 of the issue of April 3, 1926. On the other hand Messrs. Charles Hope and Son foreshadow a production of not less than 660,000 tons as against the figure of 630,000 tons which we adopted; but it will be noted that the Firm does not view with any misapprehension, and indeed rather welcomes, the prospect of a possible surplus of 55,000 tons.

At the end of last week the Colonial Office announced that during the Quarter which commences to-day the percentage of Standard Production of rubber exportable from Ceylon and Malaya at the minimum rate of duty will be 100 per cent. Furthermore the maximum limit for the assessment of Standard Production in the case of Malayan Estates of less than 25

acres will be raised to 400 lbs. per acre for matured rubber and 200 lbs. per acre for rubber-in-bearing ; while the maximum limit of 500 lbs. per acre for estates of over 25 acres which was provided for under the original regulations will no longer be enforced. Provision is being made for restriction of exports at the minimum rate of duty to 80 per cent. of Standard Production during the quarter beginning with August 1st if the average 'spot' price of rubber on the London Market falls below 21d. per pound during the quarter commencing to-day.

The Future of Tea Mr. Henry Kerr Rutherford, Ex-President of the Ceylon Association in London and First President of the Rubber Growers' Association, states in the current issue of *Tropical Life* that he considers that labour scarcity and the fact that no new areas under first class tea appear to be coming into bearing seem to assure rosy prospects for those who own estates which can produce the finest grades. He points out moreover that exports from Japan are decreasing and from China are stationary ; and that even if 40,000 acres were planted to-morrow in India, Ceylon or the East Indies, it would be five years before 20,000,000 lbs. were added to the World's supply, and that that figure at the present progressive rate of consumption would be quite easily absorbed.

Travancore Railway Projects In our Editorial Notes on February 13, 1926, we stated that the Travancore Government was undertaking a survey for a railway line (1) from Quilon to Ernakulam with branches from two of the stations thereon—Mavelikara and Ettumanoor respectively—(2) to Cochin *via* Haripad, Ambalapuzha, Alleppey and Arukutty ; and (3) to Mundakayam *via* Kanjirapalli. A statement which has been prepared for the information of the members of the Sri Mulam Assembly indicates that this main line and its two branches will be respectively 96, 62 and 32 miles in length ; and further shows that the Government has in contemplation two other lines : (4) one of 17 miles from Thripunithura to Thodupuzha *via* Kothamangalam and some suitable point in the Periyar Valley where it will touch the proposed new cart road to Munnar ; and (5) the other 46 miles in length from Trivandrum to Nagercoil *via* Mulakamudu, Colachel and Rajakamangalam. As a preliminary to the above programme the present Quilon-Trivandrum line is to be extended 2½ miles to Tambanur in the centre of Trivandrum Town. All the lines are to be on the metre gauge and it is proposed to construct No. 1 first ; then No. 3 ; then Nos. 4 and 5 (the question as to which of these two will come first being left pending until after the completion of No. 3) ; and last of all No. 2, i.e., the Coast Line from Mavelikara and Alleppey to Cochin.

Coffee in British Guiana We learn from the March number of *The Tea and Coffee Trade Journal* that the Agricultural Department in British Guiana gives the 1925 acreage under Coffee in that country as 4,096 as against 4,240 in the previous year and 5,158 in 1918. It estimates the present annual production at about 600,000 lbs. of Liberian and 300,000 lbs. of Arabian ; and of this total of 900,000 lbs. about three-fourths are exported and one-fourth is consumed in the country itself. The

actual exports in 1925 amounted to 668,029 lbs. of which no less than 653,732 lbs. went to the Netherlands.

The Agricultural Society of Trinidad and Tobago announces in the January issue of its Journal that in future it will include in its monthly statistics the exports of rubber and coffee from *Trinidad Coffee and Rubber.* Port-of-Spain. It says that cultivation of both these products is increasing and that they are beginning to occupy a large place in the Agricultural Products Export List. As regards rubber it reports that the good prices realized in 1925 have given an exceptional stimulus to planting, and that tapping of both 'Hevea' and 'Castelloa' is being vigorously carried out. The exports of coffee and rubber during January 1926 were respectively 120,825 lbs. and 16,261 lbs.

The Rt. Hon. The Secretary of State for India has appointed Mr. David Clouston, C.I.E., Agricultural Adviser to the *Royal Commission on Agriculture* Government of India, to be liaison officer between the Commission on the one hand and the Government of India and local Governments on the other, and has selected as Joint Secretaries to the Commission Mr. F. W. H. Smith of the India Office and Mr. J. A. Madan, I. C. S. The Commission is expected to meet in India in November next.

NOTICES

THE LABOUR DEPARTMENT, U.P.A.S.I.

Mr. F. W. Winterbotham, Superintendent of the Labour Department, Mangalore Division, has been appointed to act as Director during the absence on leave of Major C. H. Brock, O.B.E., V.D. Until further notice, therefore, communications intended for the Director should not be sent to Coimbatore but addressed to The Acting Director, Labour Department, U.P.A.S.I., MANGALORE. Major Brock hopes to have six months in England, and on behalf of our readers we wish him a very pleasant holiday at Home.

THE SCIENTIFIC DEPARTMENT, U.P.A.S.I.

We have received from the General Scientific Officer and the Tea Specialist the following programme of their forthcoming tour which we referred to in our Editorial Notes last week. Messrs. Munro and Shaw will make every effort to adhere to the dates shown below, but of course unforeseen contingencies may necessitate some slight deviation from the programme which they have drawn up.

April 27 to May 3, Kanan Devans.	May 24 to May 29, Anamalais.
May 4 to May 10, Central Travancore.	June 1 to June 5, Nilgiris.
	June 6 Wynaad.
May 11 to May 13, Mundakayam.	June 7 to June 17, Nilgiri and
May 14 to May 19, South Travancore.	Malabar Wynaad.

THE RUBBER PROSPECT

After the somewhat phenomenal increase in consumption that took place in 1925, it is rather more difficult than usual—write Messrs. Charles Hope and Son under date February 11, 1926—to form an estimate of production and consumption during the current year. Holding, as most of us do, very optimistic views on the future of rubber during this decade we must be careful not to allow our opinion of the more distant future to distort our view of the near.

The period when production overtook consumption commenced towards the end of last year, as anticipated in the final paragraph of our report dated 28th April. The price of the commodity for some time was in no way affected, in fact during December the peak price for *Spot* rubber was attained. The weight of increased shipments then began to make itself felt, and prices steadily fell, with relatively small fluctuations, to about the present level.

This month, tyre manufacturers in the U. S. A. have announced a reduction in tyre prices. This reduction in price we do not suppose has been made for philanthropic reasons, we therefore assume that the stock of tyres was not being disposed of as quickly as might be desired by the makers. We should in no way be surprised if the abolition of Springdating arose from the same cause. A large stock of an unsold manufactured article has much the same effect of curtailing fresh purchases of the raw article as an unneeded stock of the commodity, providing the stock is in the hands of the manufacturers.

We do not think there can be any doubt that at present the production of raw rubber is in excess of immediate consumption. Assuming that this is so, we do not believe that manufacturers or dealers will be anxious in any way to increase the stock of rubber they may now hold. The fact that both manufacturers and dealers may be of the opinion that before many years there will not be sufficient rubber available, cannot, we think, to any great extent affect the situation.

CARRYING STOCKS

At the present high price, considerable funds are needed to finance purchases. Even if these funds are available, buyers very naturally prefer to leave the carrying of any surplus stock to the producer. Producers are obviously better able to carry any surplus stock, as the cost to them is about one-third of what it would be to the buyer. On the other hand, producers may think they have no apparent justification for holding up the commodity they produce when that commodity can be sold at a price three times its cost to them, and we believe that they will meet the market at reasonable prices as the rubber comes forward. Should prices, however, continue to decline, there will come a time when both manufacturers and dealers will realize that at the new level it is worth their while to take rubber into stock with a view to supplying the apparently inevitable increase in future requirements. It seems to us highly unlikely, so long as the price of spot rubber is at a premium over distant, that buyers will

take rubber into stock except for immediate use. Much less will they do so when they have every reason to believe that there will be considerably more stock available during next month. As producing companies cannot pay dividends without selling their produce, and even at lower prices will still make satisfactory profits, it seems likely that the commodity will be sold as it comes forward, and that before long the spot price will be at a discount to future positions. If consumption were to show any big increase this position is likely to be accentuated by manufacturers buying forward to safeguard their future supplies; but producers meeting the market and consumers not buying spot rubber except for current requirements, there seems room, with rubber at its present high level, for a further decline in price.

'AFTER THE PARTY'

For some peculiar reason there seems now to be a general idea that 2s. 6d. per lb. for rubber is a somewhat poor price. The only reason for this is that for a short time rubber was in good demand at a dollar per lb., and to sell rubber at under 3s. when before it sold at over 4s. 7d. creates an 'after the party' feeling. A little medicine in the form of 1/6 rubber would probably not take long to effect a complete cure. Should such a fall in price take place, and we are not suggesting that it will, we believe, from the manufacturer's point of view at any rate, it would 'but flatter to deceive.'

The one thing that tends over a period of years to make rubber an unstable article, is the fact that it takes about seven years to bring it into bearing. Much can happen in that time and seven years is a long period to wait before there is any chance of getting any return on one's capital outlay. The consequence is that when prices are low the investing public see no incentive to subscribe to planting propositions, and when prices are high they reason that it is not worth while to plant up rubber, as by the time it is in bearing prices will have fallen again, the nett result being that surprisingly little fresh planting has been and is being undertaken.

1921 AND 1922 PLANTINGS

Those estates that have continued to plant out rubber during the last five or six years, more particularly during 1921 and 1922 when the price was at its lowest, will reap the full benefit from any scarcity of rubber, and consequent high prices that may eventuate in the course of the next year or so, as rubber planted in 1920-21 will then be coming into bearing.

Largely owing to the introduction of balloon tyres the consumption of rubber during 1925 showed an abnormal increase over the preceding year. The increase was about 20 per cent. We think it very unlikely that the percentage of increase this year will be as much as during 1925. The transitory stage from cord to low pressure tyres has been passed, and over a period of years the percentage of increase is likely to adjust itself to a normal figure, and an increase of 20 per cent. is not normal.

We think that for the above and other reasons the percentage of increase during 1926 will be relatively small. We therefore place World consumption for the year ending December 31, 1926, at about 605,000 tons. We should not be surprised if this proved a too liberal estimate.

STANDARD

Any estimate of production very largely depends on the debatable point as to whether estates in the restricted area can produce their full standard production or not, or whether they can produce more than their standard production. We considered this point at some length in a report dated November 10, 1925, and we there gave it as our opinion that 'the restricted area as a whole can and will produce more than the standard production, possibly not immediately restriction is removed, but within, say, four months of that time.' Since then further alterations in the standard production have been made by the addition of special allowances. Certain estates have also had their maximum standard production per acre raised from 400 to 500 lbs. The standard production is now being revised for the 1925-26 period. It is, therefore, quite likely that when the new standard is announced it may be found that 100 per cent. production cannot be exceeded. The new figures have not as yet been published.

We might mention here that the restriction scheme did not automatically end when 100 per cent. of standard production was allowed to be exported. There is no reason why the scheme should not be continued indefinitely, in which case 110 per cent. or 130 per cent. or any other percentage might, during the course of time, be permitted.

WORLD PRODUCTION

Providing the price of the commodity does not fall below 2s. per lb. for any length of time we estimate that the World production for the calendar year 1926 will amount to about 660,000 tons. The possible surplus during this year may therefore be about 55,000 tons. If our estimates are approximately right and this surplus eventuates, it will make a welcome and much needed addition to the present depleted stocks, and should have the effect of causing a more settled market and fewer rapid fluctuations in price.

We do not propose in this report to undertake the hazardous task of giving any estimates for any period after the current year. The general and accepted opinion is that for the next few years there will not be sufficient raw rubber available to satisfy manufacturers' requirements. We have seen two or three estimates put forward, not by any one actually engaged in the industry, which appear to show that consumption over a period of several years will exceed production by several hundred thousand tons. As there is not a sufficient stock of rubber in the world to make this possible, we presume that for 'consumption' one should read 'requirements.' These estimates for the more distant future are not without interest as they help to show the potentialities of the rubber market.

The best interests of the Rubber Industry would be served by the raw article being produced and distributed at a price which would show to producers a return high enough to induce them to produce more; and yet low enough to induce consumers to consume more. No doubt the two interests concerned will arrive at their own conclusions as to what should be this desired level.

SYNTHETIC FARMYARD MANURE

The *Travancore Government Gazette* of the 13th ultimo contains the following note by Mr. K. R. Narayana Iyer, B. A., Assistant Agricultural Chemist, on the preparation of the Synthetic Farmyard Manure which, as reported on Page 241 of our issue of the 10th idem, he considers may well prove as efficacious as ordinary cattle manure :—

INSTRUCTIONS FOR CONDUCTING EXPERIMENTS ON THE
PREPARATION OF SYNTHETIC FARMYARD
MANURE FROM DRY LEAVES.

Preliminaries.

1. A pit 18 ft. \times 12 ft. \times 2 ft. should be made for conducting an experiment with about 10 cwts. of dry materials.
2. The pit should be symmetrical and its floor and sides should be plastered with cow dung.
3. The pit should also be protected from sun and rain by means of a thatched shed.
4. In addition to the raw material, viz., 10 cwts. of dry leaves, 42 lbs. of Ammonium Sulphate and 56 lbs. of Carbonate of lime should be purchased and stocked. 32 lbs. of burnt lime spread evenly on the ground with occasional stirrings for about a week, will give 56 lbs. of Carbonate of lime.

Experiment.

1. The dry leaves should be spread in the pit in layers of about 6 inch thickness. As each layer is spread lime (Carbonate) should be broadcasted and water sprinkled as evenly as possible, to make the material just moist.
2. A 2nd layer is then spread over the 1st and treated with lime and water in a similar manner. This should be repeated until the whole material is utilized.
3. The Ammonium Sulphate should now be dissolved in about 50 gallons of water and evenly sprinkled on the surface of the heap. The whole stock should be further treated with enough water to make the material sufficiently moist but not too wet.
4. Water should be added to the stock from day to day to make up the loss by evaporation. It is in the first few weeks of treatment that the loss of water is most heavy.
5. After a period of three weeks the heap should be dismantled, thoroughly mixed up and rearranged.
6. Water should be added hereafter only discretionally since the moisture retaining capacity of the partly rotted material is considerably increased at this stage.
7. During the sixth week also the heap should once again be mixed up and rearranged.
8. By the tenth week, the material will have rotted completely and become dark, soft and plastic like ordinary cattle manure.

THE EARLY HISTORY OF THE RUBBER INDUSTRY

(Concluded from page 257, issue of April 17, 1926)

The vehicles, however, were crude in construction, and the roads defective. In those days, moreover, the latter were largely privately owned and subject to heavy tolls. For the time being, therefore, the development was killed off by popular prejudice and parliamentary restrictions which were not removed until a comparatively recent date. It should be noted, however, that Walter Hancock's machine attained a speed of twenty miles per hour on the level and made journeys as far afield as Birmingham and Marlborough.

The bad condition of the roads at this period naturally attracted attention to the possibilities of rubber as a means of reducing vibration, and it was not long before solid rubber tyres began to be applied to the wheels of carriages. What is perhaps even more surprising is the fact that the conception of the pneumatic tyre took shape as early as 1845, when R. W. Thompson took out his famous patent. The idea, however, was before its time, and though Thompson had carriages fitted with his tyres tested in Hyde Park, the importance of the invention did not gain recognition and lay forgotten for nearly fifty years. Though the pneumatic tyre did not gain recognition at the time, solid tyres still continued to be employed on horse-drawn vehicles. Some time later Thompson turned his attention to the development of the steam tractor, and in 1865 the 'Ravee' was constructed for the Indian Government. This machine was shod with solid rubber tyres, and successfully accomplished a trial between Norwich and Edinburgh and back. It therefore represents the first successful attempt to apply solid tyres to heavy mechanically propelled vehicles.

During the sixties the 'boneshaker' was coming into vogue as a means of locomotion, and a man named Hastings is credited with being the first to apply a rubber tyre to the primitive machine then in use. Thompson's patent, however, remained forgotten, and although the use of the bicycle and tricycle steadily gained in popularity, it was not until 1888 that J. B. Dunlop, a Belfast veterinary surgeon, conceived the idea of using a cushion of compressed air instead of solid rubber to lessen vibration. His first set of pneumatic tyres was made and tested in secret on a 'Quadrant' tricycle supplied by Messrs. Edlin and Co., of Belfast, and the result being highly promising the machine was given a trial at a race meeting in Dublin, to determine how it compared in speed with those fitted with the normal solid tyres.

The new device proved an instantaneous success on the racing track, and its commercial possibilities were at once appreciated by Harvey du Cros, the then chairman of the Irish Cycling Association. The following year, 1889, the Pneumatic Tyre and Booth's Cycling Agency was floated to develop J. B. Dunlop's idea, and in February, 1890, the new tyre was first exhibited

at the Stanley Show. The young company was, however, suddenly confronted with the discovery of the long-forgotten Thompson patent, which rendered the validity of that of Dunlop extremely doubtful. Both the Dunlop and Thompson tyres, however, were elaborate in construction, rendering removal and repair extremely difficult, it was only a few months before two inventions were made which solved this difficulty, and, incidentally, the problem which confronted the Pneumatic Tyre company. On 24th July, 1890, W. E. Bartlett patented the well-known 'Clincher' type of attachment, while in September of the same year C. K. Welch followed with his invention of the 'wired-on' cover. Welch's patent was acquired by the Pneumatic Tyre Company, and the sequel is well known to all. Within a few years every cycle was fitted with tyres of one or other of the two types, and by 1895 an early motor car was driven in the Bordeaux Paris trials equipped with pneumatics. Since this time the progress of this new branch of the rubber industry has been phenomenal, and its consumption of rubber is now estimated to represent no less than 75 per cent of the total world's supply.

It is obvious that this extraordinary development could not have taken place without a corresponding development in the production of the raw material, and this brings us to the story of the foundation of the plantation industry and again provides a testimony to British foresight and enterprise.

THE DEVELOPMENT OF THE PLANTATION RUBBER INDUSTRY

The primitive methods by which the natives prepared the rubber, and inaccessibility of many of the districts in which the trees were found attracted attention in the early days, and it is not surprising, therefore to find that the possibilities of forming plantations of rubber in various parts of the world were mooted, while the manufacturing side of the industry was yet in its infancy.

For instance, in the article in the 'Bee' in 1791 to which reference has already been made, the desirability of cultivating rubber is strongly emphasized; while in 1798 Howison, in recording his discovery of vine rubber in Penang, suggests the possibility of introducing the American tree into Malaya or India. While the applications for rubber were limited little inducement existed for any attempt to be made to carry these suggestions into practice, but following the discovery of vulcanization and the steadily increasing use of rubber, the matter began to be recognized as one of practical importance, and in 1855 we find Thomas Hancock corresponding with Sir J. J. Hooker in regard to the possibility of developing the sources of supply in various parts of the world. By this time the demand for rubber had overtaken the supply, and in a paper by the botanist R. Spruce we find a reference to the rapid rise in price of rubber, until in 1854 it is stated to have reached 'the extravagant sum of 2s. 9d. per lb.' No immediate attention seems to have been paid to Hancock's representation and it is probable that for the time being the active development of both new and old sources of supplies, engendered by the increase in price, was sufficient to keep pace with the steadily increasing demand, while the Indian Government were at the moment more concerned with the project of introducing the cultivation of cinchona to India, which took place in 1852. By 1865 Clements Markham,

to whom this enterprise was finally entrusted in 1859, had succeeded in his efforts, and by his work the East was soon rendered independent of the inadequate and variable supplies of this most important medicinal product.

Markham, who occupied the position of an assistant secretary at the India Office between 1858 and 1877, next turned his attention to rubber, with which he had come in contact during his visits to Peru. His first step was to obtain information as to the possibilities of introducing the cultivation of rubber in the East and the type of tree most likely to obtain satisfactory results. This work was entrusted to James Collins and Dr. Brandis, Inspector-General of Indian forests, and their reports were submitted to the India Office in August, 1872. No time was lost in putting their recommendations into effect.

In the summer of 1873 2,000 Hevea seeds procured for the India Office by a Mr. Farris, at Collin's request, were sent to Kew, but of these only about a dozen germinated. On September 22, 1873, however, six of these plants were despatched to India and safely received by the Royal Botanic Gardens at Calcutta. This date therefore marks the first introduction of the Para rubber tree into the East.

Markham, however, recognized that not only was this supply inadequate, but it was not safe to rely on the acclimatization of one type of rubber-producing tree. He accordingly arranged for the experimental cultivation of the indigenous *Ficus elastica* in Assam, and took steps to secure an adequate supply of Hevea seeds and seedlings and also specimens of *Castilloa* and *Ceara*. In 1875, Robert Cross, a gardener who had taken part in the cinchona expedition, was sent to Panama, and as a result of his efforts he delivered 134 *Castilloa* seedlings to Kew, which were sent out to India in 1876. He was then immediately despatched on a further mission to Para to secure the Hevea and Ceara plants, while an arrangement was made with W. H. Wickham to procure a larger supply of Hevea seeds at the rate of £10 per 1,000 seeds.

The story of Wickham's enterprise in chartering a steamer for the shipment of his seeds is well known, and on the 14th June Kew received a consignment of 70,000. Of these only a small proportion germinated, but these were sufficient to despatch on 14th August, nearly 2,000 plants to the Botanic Gardens, Peradeniya, Ceylon, which had been selected as more suitable climatically than India. A number of these seedlings were also despatched to Buitenzorg and Singapore. Meanwhile Cross had been successful in his independent mission, and on 22nd November delivered over 1,000 Hevea and 42 Ceara seedlings to Kew. The problem of the introduction of Para rubber to the East had already been solved, however, and from the seeds secured by Wickham at a cost of only £1,500 has arisen a great industry, which has not only brought wealth and prosperity to the East, but has enabled the manufacturers of America and Europe to meet the phenomenal expansion in the use of rubber in connection with motor transport.

NILGIRI PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of a General Meeting held on Tuesday, February 16, 1926,
at 11 a.m. in the Coonoor Club

Present

A. K. Weld-Downing (*Chairman*), Capt. E. G. Windle, Messrs. Percy Reed, H. G. Cotton, C. Vernede, L. F. Lake, W. A. Cherry, W. Ward, J. Beaver, A. N. Hearn, H. Clayton Daubeny, C. R. Clayton-Daubeny, W. E. Forbes and C. W. Hayne (*Honorary Secretary*).

Proceedings

Notice calling the meeting was read.

Minutes of previous meeting were taken as read and confirmed.

Election of Member for District Board.—Mr. A. N. Hearn was elected member in the place of Mr. N. J. Stanes.

Election of Auditor.—After discussion it was decided to leave it to Honorary Secretary to select an auditor and place his name before members at the next meeting.

Sports Club.—Teams entered for inter-district events were:—

GOLF	TENNIS	CRICKET
A. N. Hearn.	A. K. W. Downing.	C. R. C. Daubeny.
T. Colthurst.		H. C. Daubeny.

Kallar Bridge.—In reply to the resolution passed at the last meeting as to when the Kallar Bridge would be open, the following reply has been received from the Secretary, U.P.A.S.I. :—

I am to-day in receipt of a letter from the Public Works Department advising me that the Bridge will probably be open for traffic at the end of April or beginning of May next.

Telephones.—Estimates, etc., had been sent in by the Divisional Engineer, and it is hoped installations will soon be set up.

Nilgiri District Board Toll Gates.—This was discussed with a view to guiding our member in the next D. B. meeting.

U.P.A.S.I. Meeting.—The Agenda was gone through, and instructions given. Mr. Percy Reed was elected General Committee member in place of Mr. W. E. Forbes who is proceeding to England shortly.

Miscellaneous Correspondence.—Under this head requests to become members and personal members of the N. P. A. were read.

Mr. G. N. Smith was elected as personal member, and also Mr. Cherian.

As regards the other applicants the Honorary Secretary was asked to find out the acreage of the Estates.

Read letter from Civil Surgeon, Coonoor, in reply to one from Honorary Secretary re admittance and discharge of coolies into and from the Lawley Hospital. *Recorded.*

With a vote of thanks to the Chair and to the Secretary, Coonoor Club, for the use of the room the meeting terminated.

CHRIS. W. HAYNE,
Honorary Secretary.

A. K. WELD-DOWNING,
Chairman.

GRASSY FLAVOUR IN COFFEE

AND

THE REMEDY

Writing from Miotoni Estate, Nairobi, one of our readers, referring to our recent writings on 'The Grassy Flavour in Coffee', tells us 'one of the causes of this flavour is the use of stagnant water when washing the parchment. This might explain the fact that this flavour is more noticeable with coffee prepared in the dry season, as then many rivers may cease to flow and the planter be reduced to using very stale and stagnant water. In such cases, however, the flavour is noticeable at once, while in the cases quoted by you it is reported that the trouble occurred some months after the coffee had been bought.

'Presumably this was hulled coffee. Had it been still in parchment, I could understand the flavour hanging to it and possibly getting stronger. Is it not possible that the conditions of storage after purchase may have had some effect? I am sure all our coffee planters will watch with interest any further information on the subject, and especially the one or two remedies that are suggested in your article.'

The letter from which the above is taken was really addressed to the *Farmers' Journal* at Nairobi, and although no copies of that popular contemporary have come our way to enable us to see what was said it seems that the whole matter has been discussed by letters and otherwise in their pages. For instance, our correspondent writes that in the *Farmers' Journal* of December 31, extracts from the notes in our November issue were published.

We believe that Mr. S. Simpson, Director of Agriculture in Uganda, investigated the matter and published a report, also Mr. Lancaster from Costa Rica, but at the moment neither reports are to hand. Later we may find them. Meanwhile, we have been learning about the rapid filtering of water at a small cost.

'GRASSY' FLAVOUR IN COFFEE AND ITS REMEDY

'Rome was not built in a day' and, in the same way, we do not expect nor must others expect that we have a cut-and-dry dead-sure, get-well-quick remedy to be applied right away. All the same we feel that we are well on the way to secure suggestions that will in the end be both useful and efficacious, especially remembering what is said in the above-quoted letter about the use of stagnant water in one locality for washing the coffee.

Let us take it that the said water is in a pool or pond left there by the river which has run dry, and which will remain dry until the next rains start. If the winds blow strong, and the sun shines long, the water in these pools also disappears; and, whilst doing so, become more and more objectionable. Remembering, however, the open-air bath we used to make

in the tropics, the use of which we enjoyed immensely, we would first suggest to the coffee planter that :—

HE MAKES AT LEAST TWO CONCRETE TANKS AND
PROBABLY THREE

to receive and store the water whilst the river is still flowing. The first tank should stand higher than the second one ; it should be quite half as large again if not double the size. In any case its base should be on a level with the top wall of the second tank if not above it, so that the cemented canal which connects the two, will have a good down-flow to carry the coffee and water when the time comes to use it. In order to prevent waste of water through evaporation during the dry season, it might be an advantage to put a roof over each tank, whether it contains water or not, because if the empty tank gets heated from the sun, should it be brought into use it will be no advantage to the planter anxious to conserve every drop he has.

Such work it might be claimed, especially in these days of higher costs, is likely to prove expensive, but surely the cost will be small in comparison to the harm done to any coffee-producing centre that gets a name for having ' Grassy ' coffee. Meanwhile the tanks are daily receiving and discharging the water of the stream or river until it is noticed that there is a tendency for the river to run low, when the top tank, if not both, should be filled with water, and any surplus left to escape at the sides. With a pump at the lower end it could be arranged, even in the driest season, to move the water from one tank to the other and so keep both filled ; or if it is necessary to cleanse them or to repair them for some reason, a third tank might be used to receive the water from one of these two at a time.

We have, therefore, instead of the more or less dirty, and probably a very dirty, pool of water, two concrete tanks which are either wholly or partially full. Into the upper and larger tank the coffee berries straight from the pulper are introduced, and swirled round to remove as much of the mucilage and vegetable matter as possible. The water with this pulpage is run off then, let us say, to the auxiliary tank No. 3 and, roughly cleansed of the slimy matter that it contains, it can then be sent back to the first tank and used again to swirl round with the pulp coffee and then sent along the cement canal to the second tank whilst being washed, etc., on the way down—care being taken to keep the canal clean when the coffee and water have passed. From No. 2 tank it will be necessary to again clean and filter the water before returning it to the first tank for a second lot of coffee ; but this can be done without much trouble by means of the same pump that is used to return the water to tank No. 1. All the same, I hear you say :—

WHAT A LOT OF TROUBLE !

Quite so, but surely your coffee crop is worth taking trouble over, and spending money on its preparation as well ? All the same, we do not

claim to be infallible ; so if you have a better plan we shall be glad to hear of it. These notes have been published for that reason alone, and you must remember we are only speaking of the height of the dry season when the quantity of water appears to be limited to an odd duck pond or two wherever found. This being so, since it is suicidal to use stagnant water, how else can you clean and filter the water except on some such lines as those proposed? First you remove the pulpage at the least cost to your water supply, and then you still have to cleanse and filter the water that remains, and if the dry season is prolonged, you must take great care that what little water you have will last you out. With this process all water used can be made quite clear and bright ; as it is done with the muddy water of the Magdalena River in Colombia, I am sure it can be done with such water as we have been discussing. If you wish to discuss the quantity of water, this can be turned out at the rate of 540 gallons an hour, under a water-pressure of about 50 lbs. only, with the help of a 37-cylinder filter costing £60 in London, therefore the cost is not great. Needless to say, if you want 1,000, 1,500, or 2,000 gallons an hour, all you have to do is to run a battery of these filters at a *pro rata* cost, whilst probably your pumping would remain the same.

HOW IT IS DONE

First to remove the pulp and dirt we would suggest that compressed sponge filters be used here. In doing so we remember that the supply of water can be very short ; would you then be able to spare enough with which to wash the sponges and then cleanse the water by means of a charcoal filter? This is a point you must decide on the spot. Taking it that you can wash your sponges, you could then strain your water to remove as much foreign matter as possible, and then bring the charcoal filters into play or go direct to the 37-candle filter, according to which suits your purpose best.

THIS IS AS FAR AS WE HAVE GOT

Will those interested in the matter now give us their views on the possibilities and the impossibilities suggested in these rough notes? We hope they will, because then between the lot of us, coupled with the help of water experts in London, to whom we can apply when we have a fairly good idea of what is practical and what is not, we can more or less put the plan into action and see how it works, and so gradually evolve a practical scheme without being too costly ; meanwhile we would insist that (a) stagnant water must not be used to wash coffee on any account, and (b) such water can be easily and inexpensively cleansed and filtered along the lines discussed in these notes, or if not, will those who wish to criticize the plan, let us have their views on the subject.

Tropical Life.

(N.B.—Previous references to this subject will be found on pages 20, 38, 58 and 248 of *The Chronicle* for the current year. Ed.)

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending April 24, 1926
Bank Selling Demand Draft on London

19th	20th	21st	22nd	23rd	24th
17 27/32d.	17 13/16d.	17 13/16d.	17 13/16d.	17 13/16d.	17 13/16d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending April 3, 1926	January 1 to April 3, 1926	January 1 to April 3, 1925
TEA (WEEK ENDING APRIL 3, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamalais—			N. India.	1 9·12	1 9·36	1 6·83
Sholayar ...	151	1 10	S. India	**1 10·55	††1 9·75	††1 6·43
Kallyar ...	66	1 10½	Ceylon...	1 11·23	1 10·42	1 8·16
			Java ...	No Sale	1 5·70	1 1·73
			Sumatra.	do.	1 7·87	1 4·67
			Nyassa-land.	do.	1 7·10	1 3·82
(b) Nilgiri-Wynaad—			Total ...	*1 9·84	†1 9·41	†1 6·66
Davershola ...	78	2 0				

(B) COFFEE

SPECIAL CABLE, LONDON, APRIL 28, 1926

'A' QUALITY 147 s. MARKET FIRM

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, April 27, 1926, was 23½ d.

** Based on 295 packages.

 †† " " 50,916 "
 †† " " 49,079 "

* Based on 24,843 packages.

 † " " 935,207 "
 † " " 688,746 "

(3) *Précis of reports on the London Market received on Monday, April 26, and covering the seven days ending Tuesday, April 6 :—*

(1) *Tea.*—As indicated on the previous page, the solitary sale which took place during the week ending April 3rd was very small, and the 295 packages of South Indian on offer realized the satisfactory average of 1s. 10·55*d.*; the Davershola Estate parcel containing some broken Orange Pekoe which fetched 2s. 4½*d.* per pound. The next sale was fixed for April 13th. The Southern India production during 1925 is placed at 47,975,130 lbs. as against the 46,752,000 lbs. which we recorded as the 1924 production on page 228 of our issue of April the 3rd, where can also be found for comparative purposes the production for 1905, 1915, 1920, 1922 and 1923.

(2) *Rubber.*—Stocks increased by 2,624 tons to 13,740 tons during the period under review. On April the 6th, the 'Spot' quotation for first latex crepe was 2s. 3¼*d.*, and of course the increase in the London Stocks is encouraging consumers to keep out of the market as long as they possibly can. A reaction, however, seems inevitable sooner or later; as the 1927 production is not likely to exceed the 1926 production whereas presumably consumption will show a considerable advance.

(3) *Coffee.*—Owing to the Easter Holidays the market was to all intents and purposes inoperative during the seven days under review, but the price of East Indian 'middling and fine A Size' was quoted nominally at 132s. to 160s. per cwt.

III. Weekly Rainfall Statement

From Sunday, April 18, 1926, to Saturday, April 24, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	N.R.	0·96	N.R.	19. Coonoor ...	0·54	0·22	0·76
2. Kalthuritty.	2·12	1·53	3·65	20. Kotagiri ...	1·31	0·43	1·74
3. Tenmalai ...	3·34	1·07	4·41	21. Ootacamund	2·36	1·80	4·16
4. Mundakayam.	1·35	1·53	2·88	22. Yercaud ...	1·69	1·26	2·95
5. Peermade...	N.R.	N.R.	N.R.	23. Devala ...	0·01	0·55	0·56
6. Twyford ...	2·45	N.R.	N.R.	24. Gudalur ...	0·23	1·19	1·42
7. V'periyar ...	0·53	1·35	1·88	25. CALICUT ...	0·62	...	0·62
8. Kalaar ...	2·24	1·70	3·94	26. Kuttiyadi ...	1·18	...	1·18
9. Chittuvurrai	0·70	2·16	2·86	27. Vayittiri ...	0·02	0·20	0·22
10. BODI'KANUR	0·13	0·35	0·48	28. Manantoddi.	1·22	...	1·22
11. COCHIN ...	0·20	1·12	1·32	29. Billigiris ...	1·24	1·76	3·00
12. Mooply Valley.	0·16	0·38	0·54	30. Sidapur ...	1·67	0·06	1·73
13. Pachaimalai	1·95	3·28	5·23	31. Pollibetta...	1·48	...	1·48
14. Mudis ...	N.R.	2·12	N.R.	32. Somwarpett	N.R.	...	N.R.
15. POLLACHIE.	...	2·31	2·31	33. Ballupete ...	0·11	...	0·11
16. Manjeri ...	...	0·01	0·01	34. MANGALORE.	0·71	...	0·71
17. Nilambur ...	...	...	...	35. MADRAS ...	...	0·10	0·10
18. Naduvattam	0·24	0·58	0·82				

W = During the week.

P = Previously.

N.R. = No return.

N.B.—We have received no returns for the week ending April 24, from Stations Nos. 1, 5, 14 and 32; nor for the previous week from Stations Nos. 5 and 6. Will the Superintendents concerned kindly send the missing figures in?

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 19] SAT., MAY 8, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	301	South Coorg Notes ...	310
The Restriction Scheme ...	303	Rubber Selling Organization ...	311
Australia for Small Incomes ...	304	Economics of Rubber ...	313
An Interesting New Application of Rubber ...	306	Exports of Coffee, Rubber and Tea ...	314
Seven A-Side Rugby ...	307	Commercial and Meteorolo- gical ...	315
The Ethics of Restriction ...	308		

EDITORIAL NOTES

Our Readers are doubtless aware that, with a view to obtaining orders, it is Mr. Willie Burke's custom to circulate through the *Planters' 'Week' Photographs* Planting Districts after every Planters' 'Week' an Album containing specimens of the photographs taken by him during the Meet. Mr. Burke asks us to say that the 1925 Album was not returned to him, having presumably been inadvertently retained by some one on the circulating list; and that he would be very much obliged if any one, who on reading this note remembers that it is lying in his bungalow, would be so kind as to send it back to him. We fear moreover that the 1926 Album seems likely to meet with the same fate as the 1925 one as its whereabouts have been a mystery for some time; and we should be glad if whoever is at present responsible for its detention would see that it goes forward without delay either to Mr. Fulcher at Devarshola or to Mr. Willie Burke at Ootacamund.

It will probably be many a long day before Monkey Gland secretions or indeed any other rejuvenator will disclose to the people at large the secret of perpetual youth; and so our Readers must expect, like all other workers, to find themselves sooner or later figuring on the Retired List. When that time comes, and they are formulating definite plans for the years of pleasant and well deserved leisure which should follow the years of almost uninterrupted work; they may find their pet schemes seriously prejudiced through on apparent insufficiency of this world's goods. Hence we make no apology for reproducing elsewhere from *The Pioneer* an article which indicates that such may after all be able to realize their modest wishes provided they are content to make Australia instead of England their future Home. We realize of course that the proviso may prove a deterrent to the many for whom England is the embodiment of all that they value most, but at the same time the many and increasingly disconcerting features of life in the Old Country for those of limited income have, we fear, brought about a very great discrepancy between the England of one's ideal and the England which actually obtains to-day.

At the eighth Annual General Meeting of the Nilgiri Wynaad Planters' Association held at Gudalur on the 27th ultimo Mr. F. Farmer was appointed Honorary Secretary of the Association in succession to Mr. D. Mackintosh of Periasshola Estate. Communications for the Association should therefore be now addressed to the former gentleman at Mango Range Estate, Mango Range P. O., Nilgiri-Wynaad.

As of possible interest to the many Rugger devotees amongst our Readers who must find that the scarcity of available players precludes them from indulging except on very rare occasions in one of their favourite games; we reproduce on another page a cutting from *The News of the World* on 'Seven A-Side Rugby, about which we published a letter from Mr. N. C. Whitton on page 75 of our issue of January 30, 1926.

The majority of our readers, who are doubtless appreciative owners of Gramophones, will feel indebted to the esteemed Honorary Correspondent who has so kindly gone to the trouble of sending us an account of the Rev. L. V. Griffith's simple but apparently extraordinarily effective device for reducing to a minimum any tendency towards 'tin-caniness' which their instruments may display, and for obtaining a more resonant but withal a more natural tone. The minority who hope at some future date to become possessors of Gramophones will thankfully note our Correspondent's description of Mr. Griffith's invention for future use; while even those, if there are any, to whom the most magnificent Gramophone *de luxe* is only slightly less objectionable than a broken down barrel organ or a unharmonic German Band may be grateful—poor things!—for a contrivance to make the sounds that harrass them a little less characteristic of what in their opinion is apparently sheer unadulterated noise.

THE RESTRICTION SCHEME

As stated in our Editorial Notes last week, the Colonial Office has announced that from the 1st instant rubber up to the full amount of the Standard Production will be exportable at the minimum rate of duty from Malaya and Ceylon. Furthermore it has decreed—presumably on the advice of the experts on the Colonial Office Advisory Committee—that should the average price for the May-July quarter fall below 21*d.* per pound the percentage of permissible exports at the minimum duty will be reduced during the ensuing three months from 100 per cent to 80 per cent.

On the one hand therefore the Colonial Office has clearly shown that any undue accumulation of stocks and consequently decline of price, which may result from the now sanctioned increase in unpenalized exports, will be automatically reduced in the August-October quarter when prohibitive duty on any exports in excess of 80 per cent of the Standard Production will be reimposed.

On the other hand the Colonial Office announcement seems to anticipate that it will in the event possibly prove desirable that exports during the August-October quarter should be increased. At least that is how we read the statement that the maximum assessment of 500 lbs. per acre for estates of over 25 acres will no longer be enforced. This concession is only applicable to Malaya, since no maximum assessment limit was ever assigned to Ceylon estates; which indeed were enabled through an order made by the Governor in Executive Council last February to apply before April 1 for reassessment on proof of productivity if their original assessment was under 500 lbs. We gather, however, that many *prima facie* under-assessed estates refrained from paying the prescribed reassessment fee which had to accompany such applications because they considered that restriction would be raised *in toto* at the beginning of May; and such estates, it would therefore appear, will as a consequence of their miscalculation be labouring under indirect restriction until and unless further provisions for reassessment are made. The present concession therefore has no bearing on the position in Ceylon; and as regards Malaya it seems to us, as we have already indicated, that it will have no radical effect in the immediate future on the state of affairs which now obtains. It is presently—to use the language of Mechanics—a static rather than a kinetic force. And this is of course because Malayan estates will presumably be required to prove productivity—a process which will take some months—as a necessary preliminary to obtain increased assessment; and consequently the potential force of the concession is unlikely to become an active factor in the situation until the present quarter has elapsed. Thereafter it will be functioning; and exert its full effect if time has shown that yet more rubber than has gone forward can be advantageously absorbed. On the other hand if time has brought about a slump its full effect will be counteracted, if not entirely nullified, by the automatic reduction of the exportable percentage of Standard Production to 80 per cent.

A minor concession in the Colonial Office announcement is the assessment of estates under 25 acres at 400 lbs. in the case of matured rubber and 200 lbs. in the case of rubber-in-bearing and not matured, and in these cases presumably export certificates for the prescribed amounts will be issued without assessment just as at present Ceylon estates under ten acres are automatically granted export certificates at the rate of 426 lbs.

The decline in price which commenced in the middle of December appears to have been stayed about three weeks ago; and since then the market has remained quite moderately firm. We have little doubt that this

satisfactory symptom will be accentuated by the present announcement ; which should indicate to buyers now holding off of the market that there is no intention of allowing the price to collapse as tragically as it did in 1921 and 1922.

AUSTRALIA FOR SMALL INCOMES

It is strange that so few Indian Civilians or Indian Army Officers select Australia as their home. Life is so hard in England for the poor man, or even for the man of moderate means, that there must, one would think, be many who would be glad to retire to a part of the world where a small pension may be made to go further, and to supply more of the amenities of life, than it will do in the old country. I have been in Australia now for eighteen months, my experience being confined to Sydney, but conditions are much the same in the other big towns. I have no hesitation in saying that the man with a small income, say, from £ 600 to £ 1,000 a year, can live here with a good deal more comfort and decency, and with less danger of any loss of caste, than he can do in England. It is not so much that prices are lower—in many particulars indeed they are higher—as that the mode of life is different, and does not make so many demands on the purse. There are of course, as many ways of spending money in Sydney as there are in all large towns, and there is a rich section of society here, as everywhere, which loves to display its wealth : but there is also a large, and on the whole a far more interesting class, of what we would call in India ' Sahib log,' who live unostentatiously, entertain each other without extravagance, and manage to extract a good deal of pleasure out of life at a moderate cost.

PROHIBITIVE RENTS

House rent is so high in the neighbourhood of Sydney as to be almost prohibitive. One practically never sees a house advertised for rent on a long lease, and four or five pounds a week are asked for quite a small bungalow with only two or three bedrooms and a small garden of suburban size. A great many people live in flats, for which absurdly high rents are demanded or in boarding houses, in which the charges are much the same as they are at home. But to my mind for the best plan is to buy one's own house, and the retired officer who has a capital of £2,000 at his disposal will do well to invest it in this manner. Houses in the near suburbs are, of course, expensive, but at half an hour's train journey from the city there is always a large choice of bungalows for sale at prices ranging from £1,400 upwards. My own house is situated in one of the most beautiful suburbs, about 500 feet above sea level : it is a well built brick bungalow with drawing room, dining room, four bedrooms and the usual offices, and has electric light, gas, and water laid on : it stands well back from the road in an acre and a half of garden and orchard. This bungalow cost me £1,900, and, as Sydney expands, will increase in value. This may be said of any house bought in a decent suburb, for Sydney, which already numbers a million inhabitants, is growing rapidly and throwing out its tentacles in every possible direction. Our house is just what we wanted, but it took us nearly two months of strenuous house hunting to find it. Equal bargains can always be found, I imagine, with patience and perseverance. I may mention that those who find it inconvenient to put down the whole sum at once can almost always arrange terms, but they will have to pay at least seven per cent on any balance remaining.

SOME DRAWBACKS

Food is certainly cheaper than in England and for a small family the weekly food bill need not exceed twenty-five shillings a head. Cooking is generally done on a gas stove, and there is no coal bill. For about four months in the year it is pleasant to have a fire in the evenings, but wood is cheap and coal is seldom used for this purpose. Clothing is more expensive than in England, and not so good in quality. A favourite Australian slogan is 'buy Australian made' but the tradesmen offer little encouragement in their prices to do so, and the man who likes to be well turned out will be well advised to get his outer clothing, at any rate, from his London tailor, in spite of the huge duty he will have to pay on it. The smaller articles of wear—shirts, socks, underclothing, etc., are not much dearer than at home.

It is no good denying that there is one serious drawback to living in Australia, the servant difficulty. This is worse even than in England. A maid demands from thirty to thirty-five shillings a week, and expects all her evenings free after about 6 p.m. with at least one afternoon a week in addition. Even so it is hard to get, and harder to keep, good servants, especially in a small menage, and one must be prepared to go servantless often for weeks at a time, but for the occasional ministrations of a char-lady:—they are all ladies here. This is hard on one's wife and daughters (and on 'himself' too for that matter) but houses are built with many labour saving devices, and are generally on one floor in the case of the smaller ones, so that the hardship is not as great as might be expected: in fact, a good many families, who could well afford to have servants, choose to do without them, rather than be subjected to the caprices and tantrums of these domestic tyrants.

CHEAPER SPORT

In social pleasures there is a wide scope. Golf and tennis can be played all the year round, and in the summer one of the most popular forms of amusement is surfing. An easy motor drive will take you from any suburb to one or other of the numerous sandy beaches, where this most delightful form of sea bathing can be indulged in. There are two or three first class clubs in the city, and one very good ladies' club as well, while for the younger members of the family there are frequent dances and entertainment during the season. The climate in and around Sydney would be hard to beat: for about three months in the summer one must expect occasional spells of unpleasantly hot weather, though a bad heat wave rarely lasts for more than two or three days at a time, but for the rest of the year the weather is all that could be wished—fine sunny days, with just enough rainy intervals to keep the garden in good trim.

Anyone fond of gardening, by the way, could hardly find a better field for his hobby than a Sydney suburb. The gardens along the North Shore Line, which is the locality I recommend and live in myself, are a perfect picture. Most English flowers grow luxuriantly, and the flowering trees and shrubs are exquisite, while apples, pears, plums, peaches, oranges and figs are produced abundantly in every little orchard. Nowhere in the world, I should think, does a garden repay the work of an enthusiast more munificently.

'The Pioneer.'

AN INTERESTING NEW APPLICATION OF RUBBER

Those planters who are the owners of gramophones may be interested in the following :—

Last Spring, whilst experimenting with his gramophone, the Rev. L. D. Griffith, an English Clergyman, hit upon a device which he claimed, greatly improved the tone of a gramophone. His device was nothing more than a piece of rubber tubing connecting the sound box and tone-arm. So convinced was Mr. Griffith over the improvement effected by this device that he submitted it to the Editor of *The Gramophone* who happens to be Compton Mackenzie, the well-known novelist, and he arranged a committee of musical experts to examine the device and report results. The investigations of the expert committee conclusively show that most gramophones can be greatly improved by the employment of this simple device. The employment of a flexible connection, the committee reports, leads to an improvement in the following directions :—

(1) Blasting is largely done away with, and all the ringing vibrations formerly communicated by the tone-arm to the ears of the listener are absorbed by the rubber.

(2) Many records which were formerly drowned by their scratch gain such an extra amount of tone that the scratch is much less noticeable.

(3) The wear on records is reduced to a minimum.

(4) Reproduction of most records shows greater resonance and brilliance. In the reproduction of the orchestra especially the balance is far better, and the various instruments have a much more natural tone. Some musical effects which are scarcely perceptible, if at all, with the ordinary tone-arm, are brought out very clearly by the rubber attachment.

The rubber connection is most effective on very forward machines with long amplifying systems. The improvement is, one should mention, much more marked with steel needles than with fibres. The very loudest needles can be used without harshness and with an enormous increase in realism for orchestral records. The enquiry brought out the fact that the elastic properties of the rubber and the shape of the tube are important. A pure rubber tube of about two inches in length seems to give the best results. Garden hose containing canvas is not suitable.

The explanation of the improvement effected is undoubtedly to be attributed to the greater flexibility given to the tone-arm and sound box. The needle in the ordinary sound box is so rigidly attached that vibration except in one plane is impossible, and many of the vibrations which the record is capable of imparting to the needle are not taken up. The use of a rubber connection however, permits of a wide range of flexibility, the needle being now able to vibrate in the plane of the diaphragm as well as at right angles. One should add for the benefit of those who wish to experiment, that though this flexibility in the tone-arm is the condition necessary for successful reproduction, great care must be taken to insure that the amount of flexibility is not excessive. The sound box must not be flabby: otherwise there is a danger of the needle jumping the grooves and damaging the records. Another precaution is that the back of the sound box must not touch the rubber. The Rev. Griffith has, one understands, taken out a patent for his device which can be obtained from *The Gramophone*, 58 Frith Street, London. Those interested are referred to the issues of *The Gramophone* for November 1925 and January 1926 for full details.

SEVEN A-SIDE RUGBY

H. R. H. the Prince of Wales has promised to visit Twickenham on April 24, when Rugby football enthusiasts will be afforded a magnificent afternoon's sport. On this day the sixteen final games of the seven a-side tournament, inaugurated by the Middlesex County R. F. U., will be decided, and the Prince will present the ultimate winners with the Kinross-Arber Cup—a trophy given by the country to the well-known London Scottish forward of that name, and returned on his death to the donors. Seven a-side Rugby has never been seen in England before. For 50 years it has been played on the Border by such famous Scottish clubs as Hawick, Kelso and Jedforest, and it has proved a big attraction, as the essentially open nature of the play makes it an ideal, and often humorous, spectacle at the close of a season. At a luncheon, presided over by Lord Mildmay, Mr. J. A. MacGlasham, the old London Scottish captain, explained its many peculiarities as compared with the ordinary form of Rugby. In the first place, as is implied by its title, the teams consist of seven players instead of fifteen a-side. The laws of the game are identical with those of the Rugby Union, and, therefore, substitutes are not allowed, but the county committee will permit of an extra player being nominated as reserve in case of accidents. Not more than one reserve, however, is permitted. Two periods of seven minutes each way are played, with an interval of one minute. In the event of a draw further periods of five minutes follow until a side scores, when it is at once declared the winners. Since the playing field is of the same dimensions as that in Rugby proper, it is obvious that speed is an essential factor. But strategy plays a big part in ensuring success.

THE CHARM OF THE GAME

lies in the fact that the strongest side on paper does not necessarily win. Seven moderate players who use their brains and conserve their energies are quite likely to upset the calculations of seven internationals. It is foolish to try and score more points than are necessary to win a certain round, otherwise the players are tired for the next round. And it is equally foolish to give chase to anyone who gets clear away. Far better to sit down quietly and allow him to gain his try, in order to be perfectly fresh to score for one's side when the game is restarted. Such demands are made on one's stamina that it is no uncommon sight to find at the end of a long afternoon, a slow-moving forward overhaul an 'even-timer.' The normal formation is three forwards, three three-quarters, and one full-back, and the full-back should be the fastest man on the side. He should stand nearer his three-quarter line than he would do normally, and in attack be prepared immediately to run up on the wing and become an extra three-quarter. Thus he would be the man over to score tries. Any one of the three-quarters must be able to act as scrum half, and having got the ball from a scrum, he should at once run with it, instead of merely passing it out. With only three forwards in the scrum, the heeling is done with lightning rapidity and as both sets of forwards link arms, there is no winging. The tournament has received excellent support from the Metropolitan clubs, and it is hoped it will prove as popular with the public. Forty-nine teams have entered, including Blackheath, Richmond, the Harlequins, London

Scottish, Welsh and Irish, most of the hospitals, the leading banks, and the majority of the Old Boy combinations, while the best referees in the country, B. S. Cumberlege, T. H. Vile, A. E. Freethy, A. D. Stoop, F. C. Potter-Irwin, and H. E. B. Wilkins, have promised their services. With such a large entry it will be necessary for the first two rounds to be played off on the Exiles ground at Orleans Park, and that of the Harlequins at Teddington, by April 21. The lesser known clubs are looking forward eagerly to the opportunity of measuring swords with their more famous brethren; this is really one of the underlying ideas of the competition. It will bring together the old and young players, besides fostering the county spirit. But above all the whole proceeds will be devoted to the Middlesex Hospital Reconstruction Fund. The very novelty of the entertainment, which, starting at 1.40 p.m., will continue for at least four hours, should ensure a large attendance.

'The News of the World'.

THE ETHICS OF RESTRICTION

Mr. Eric Miller was the guest of honour at a luncheon given by the American Chamber of Commerce on the 18th ultimo at the Hotel Cecil. Mr. F. E. Powell, President of the Chamber, was in the chair, and a distinguished company, including Sir Stanley Bois, Sir Edward Rosling and Mr. P. J. Burgess, were present.

Mr. Miller opened his address by a brief survey of the beginnings of the modern rubber industry up to the end of the first decade of the present century.

The rubber situation, he said, had been made use of to create a certain amount of misapprehension as to the intentions of the British Government and of the producers of rubber. What was done, however, was done not for the protection of British interests, but for the benefit of the world at large, and for every consumer of rubber and rubber goods.

In 1910, continued Mr. Miller, when the world was mainly dependent on wild rubber, the motor industry began to demand rubber on a scale that could not be satisfied. The result was a boom that raised the price of rubber to 12s. 6d. per lb., and the effect of the ensuing speculation was the transference of a tremendous amount of British capital into the rubber growing industry. The full effects of the new plantations were only felt 10 years later, when the trees reached maturity, but as early as 1913 growers had begun to wonder what was going to happen when supplies increased.

The situation was saved by the development, particularly in America, of the motor industry. During the war the world used all the rubber that could be produced. In 1919 occurred the post-war boom, but in the following year was the slump. The slump, however, was not entirely to blame. The cord tyre, which gave a mileage of something like four times as good as the old fabric tyre, had been so developed that the industry was

faced with the special problem of tyres that would last four times as long as they had formerly done. Hence all calculations of consumption had to be revised.

Voluntary restriction was tried and failed, for many planters thought that the only way to make both ends meet was to produce more rubber. Of course, that was an absolute fallacy. At the end of 1931 the Stevenson Committee reported on the acute situation, and the British Government decided to allow legislation to be passed in Malaya and Ceylon to make effective the curtailment of exports. Prices were not to be fixed, but it was left in the power of the buyers of rubber to ensure that they would get adequate releases of the commodity from the areas where restriction was in force, provided that they paid, not a fancy price, but the lowest price that would enable the industry to remain solvent, namely, 1s. 3d. per lb., which looked good in comparison with the 7d. a lb., which had been the market price for some time, a figure substantially below the cost of production.

THE SLUMP TO BLAME

There had been a fundamental change in the general position of the rubber industry as a result of what happened in 1924, when only a 5 per cent. release was secured, instead of 10 per cent, because the price was allowed to average just under 1s. 6d. a lb., instead of just over it: and the 5 per cent which they failed to get released has represented a cumulative 1,500 tons a month roughly since that time. There was no doubt that the annual world requirement of rubber was on the increase. The only doubt was what the rate of increase was going to be. For several years past the average annual increase had been 13 per cent. As a result of the slump, instead of the sources of supply being enlarged each year, there had for five years been no planting of rubber at all. It was on that account, primarily, that the world was undoubtedly faced with a difficulty in adjusting supplies.

A GIFT OF THE GODS

Nobody in this country had the slightest wish to quarrel with Mr. Hoover, whose motives in rousing America to the importance of the rubber industry were perfectly right. It was an extraordinary thing that after twenty or twenty-five years of rubber history, American capital—the capital of a people who used two-thirds of the rubber produced—was only interested to the tune of 2½ per cent in the sources of supply. It showed what absolute confidence in business there must have been between the peoples of the two countries. It was not fair to make a grievance of the fact that the British happened to have the pluck and enterprise to develop the rubber industry. They were facing the question whether there was going to be enough rubber to satisfy the world's needs. They had been justified in taking action to prevent the rubber industry from 'going to pot,' as it would have done in the tragic conditions that formerly prevailed.

SOUTH COORG NOTES

Tennis Tournament

A very enjoyable tennis tournament took place on the Bamboo Club Tennis Courts, Pollibetta, on April 27th; 28th; 29th; and 30th. There were a large number of entries; and a big attendance, comprising many visitors from North Coorg and Cannanore. Some very good tennis was witnessed, and the Ladies' singles in particular produced some excellent games.

Ladies' Singles

AMERICAN TOURNAMENT—ELEVEN GAMES

Miss Davis, minus 3/6	...	...	...	37 games (Winner)
Mrs. Irwin, Scratch	...	...	...	34 „ 2nd
„ Scholfield, minus 15	...	...	...	27 „
Miss Frere, Scratch	...	...	...	24 „
„ Gerrard, plus 15.3	...	...	...	21 „
„ Nunn, minus 1/6	...	...	...	18 „

Mixed Doubles

AMERICAN TOURNAMENT—ELEVEN GAMES

Mrs. Magniac and J. Irwin, plus 15	...	...	49 games
Miss Nunn and C. A. Reid, minus 30	...	...	39 „
Mrs. Scholfield and R. Bentley, minus 15.2	...	...	38 „
Miss Gerrard and L. Roberts, plus 15	...	...	35 „
„ Frere and P. G. Tipping, minus 3/6	...	...	Unfinished.
„ Davis and Capt. Morris, minus 15.1	...	...	33 games.
Mrs. Irwin and F. Macrae, minus 2/6	...	...	Unfinished.
Miss Mahon and C. S. Iron, plus 4/6	...	...	28 games.

Men's Doubles

AMERICAN TOURNAMENT—ELEVEN GAMES

J. Irwin and Capt. Morris, minus 2/6	...	...	45 games
J. O. F. Maurice and J. H. Sprott, minus 2/6	...	...	45 „ tie.
R. Bentley and C. A. Reid, minus 30.3	...	...	34 „
P. G. Tipping and R. B. Cunningham, minus 3/6	...	...	34 „
R. H. B. Harper and N. R. Lee, Scratch	...	...	32 „
W. E. Dickinson and J. S. Iron, Scratch	...	...	28 „
G. Scotland and A. Ricketts, plus 2/6	...	...	24 „
W. L. Roberts and J. Murphy, minus 2/6	...	...	Scratched.
F. Macrae, and C. A. S. Richardson, Scratch	...	...	Scratched.

Men's Singles

KNOCK OUT—BEST OF THREE SETS—FINALS BEST OF FIVE SETS

J. O. F. Maurice, Scratch, Bye					
J. Murphy, minus 3/6	}	Murphy	}	Murphy	}
R. B. Cunningham, plus 15.1					
R. H. B. Harper, plus 15.1	}	Reid	}	Reid	}
C. A. Reid, minus 30.3					
W. E. Dickinson, plus 1/6	}	Sprott	}	Reid	}
J. H. Sprott, minus 3/6					
J. Irwin, plus 3/6	}	Macrae	}	Reid	}
F. Macrae, Scratch					
Capt. Morris, minus 3/6	}	Iron	}	Iron	}
C. S. Iron, plus 4/6					
W. L. Roberts, plus 1/6, Bye	}	Roberts	}	Roberts	}
A. Ricketts, plus 15, Bye					
C. A. Reid won the finals against W. L. Roberts, 6/4, 6/4, 6/4.					

Dance and Supper

A very pleasant Dance and supper was held at the Club on Friday evening, April 30, after the tennis tournament. A large number were present. The Club was very artistically decorated by Mr. Scholfield.

The weather has been very threatening, but the rain kept off during the Tennis Tournament. The mornings were extremely hot, and those that played tennis in the mornings had rather a trying time of it. The thanks of the district are due to the Honorary Tennis Secretary, Mr. Bentley, for the way in which everything was so well carried out, and the long programme gone through, in the few days allowed.

Your Honorary Correspondent.

RUBBER SELLING ORGANIZATION

We note from the London financial papers that that old question of a rubber selling organization—a question which was fully discussed and came to nothing before the Stevenson output restriction scheme was inaugurated—has cropped up again. For instance, the *Financial Times* of February 22 not only contains five letters on the subject but devotes a leader to it. Before we, however, discuss the views of the London paper let us run through what its correspondents said. These 'Letters to-the-editor' are published under the general heading: 'Co-operation urged for Producers.' In the first letter 'Sitiawan,' who is obviously a Perak planter Home on leave, writes from Brighton, where we trust he is having a happy holiday and not worrying unduly about rubber, to urge 'co-operative rubber production and marketing' against the 'solid wall of American co-operative buying.' Our friend 'Sitiawan' is one of that vast number of people who strongly object to the recent tampering with the Stevenson Restriction Scheme whereby an additional release of rubber for export was allowed. He writes 'with what practically amounts to unrestricted production and export now in operation, almost every ounce of rubber that can be garnered will be garnered to help swell the growing surplus, which will continue to grow until the much despised American thinks the time ripe to take advantage of the price which we had been lowering against ourselves.' The second letter touches upon the curious psychology of the rubber grower and the rubber shareholder, this writer pointing out that the British rubber grower and the British holder of rubber shares 'is inclined to be either an unbounded optimist or a hysterical pessimist.' Well we know this to be true in regard to Malaya. When rubber is rising in price everyone in Malaya is an optimist and thinks the Stevenson Rubber Restriction Scheme no longer necessary. On the other hand, when the price of rubber sags all are pessimistic. At times we are inclined to think that the majority of people here have no definite opinions of their own but are influenced by crowd psychology.

The other letters before us deal with the actual question of a rubber selling organization. 'Two shareholders, under the caption 'A Protection Society,' urge all rubber shareholders 'to write, personally to Mr. Eric Miller exhorting him to place himself at the head of a rubber shareholders' protection society' . . . 'with a view to keeping rubber at a price yielding good dividends but at the same time low enough to encourage new uses for rubber.' The next letter is from Mr. W. N. Radford, of Nottingham. He is against a rubber selling organization, declaring that the result of a central selling agency would be that the Dutch, who would not co-operate with us in regard to output restriction, would undersell us 'and any surplus rubber would be left to the British.' Mr. Radford is, however,

equally against the Stevenson Scheme, for he describes both schemes as 'suicidal folly.' He is of the 'war to the knife' school of thought, quite forgetting that, in a war to the knife, both parties are often mortally wounded. 'Investor' comes next. After stating that sound truth that when supply exceeds demand buyers are the masters of the market, he apparently anticipates the abandonment of the Stevenson Restriction Scheme and desires that big British rubber companies should 'do what the Stevenson Scheme has been doing for the past three years.' 'Investor,' however, quite forgets, or perhaps he does not know, that about half of the rubber exported from the F.M.S. comes from trees owned by Oriental smallholders.

The other letters are much on the same lines, all the writers losing sight of the fact that the Stevenson Restriction Scheme, if it is retained, can accomplish all and more than any selling agency, even if it could be formed could do. For ourselves, we do not believe that any central selling agency for rubber from the British Mid-East rubber producing countries ever will be formed. The reason why? To find the reason why one has only to look back to all that happened before the Governments of Malaya and Ceylon brought in the law compulsorily to restrict the export of rubber above a certain percentage. There was then talk and yet more talk of co-operation but the spirit of co-operation is non-existent and never can exist in an industry such as the rubber growing industry in which there are so many smallholders. On the other hand, every one, even the smallest of the smallholders, now understands and appreciates the value of the Stevenson Restriction Scheme. It is, therefore, to the Stevenson Restriction Scheme that British rubber growers must cling until they are quite sure that the world wants all the rubber that they can produce. British rubber growers must see to it that the British Government clearly understands that they desire the Stevenson Scheme retained. If they do not make this clear, the British Government may be stampeded by American protests into abolishing the Stevenson Scheme prematurely.

Is the rubber growing industry quite sure that the sky is clear of all clouds? America uses about 75 per cent of the world's rubber and a collapse, or partial collapse, of the present great trade boom in America would very directly effect the rubber growing industry. What of the position in America to-day? We have no desire to pose as an alarmist, but recently there was published a cable from New York which gives food for thought. This cable recorded an avalanche of selling orders on the New York Stock Exchange, this 'bearish' sentiment being influenced, it is stated *by reports of a slackening of activity in basic industries and widespread cancellation of automobile orders.* A slackening of activity in basic industries in America may or may not be the first signs of an end of the great trade boom there. It may only be temporary indigestion on the part of American purchasers, but if there is going to be a diminution of America's demand for rubber, as witness the statement regarding widespread cancellation of orders for motor cars, rubber growers will be well-advised to retain the Stevenson Restriction Scheme so as to be able to prevent unwanted rubber being thrown upon the market. Better will it be to return to a 50 per cent output for which 1/6 a lb. is paid than to pour out rubber which might be unsellable or only fetch six pence or under per lb. We do not say this extreme will happen. We only put it forward as a strong argument for the retention of the Stevenson Scheme until the world position in regard to the demand for rubber is clear.

'Malayan Tin and Rubber Journal',

ECONOMICS OF RUBBER

VIEWS OF EX-PRESIDENT OF THE R.G.A.

Dependence on Motor Industry

Addressing a luccheon audience of the Royal Colonial Institute in London, on February 16th, Sir Stanley Bois, a former President of the R.G.A., who headed a mission of enquiry to America in regard to Restriction had some very interesting things to say on the general features of the industry. After sketching the early history of the plantation rubber industry Sir Stanley said :—

As a consequence of the increasing demand for rubber caused by the coincident expansion of the motor industry, it will be within the recollection of most of us that a considerable boom took place in the market for rubber in that year, resulting in the price soaring as high as 12s. per lb., thus attracting an immense amount of public interest to the product. This resulted in a very large extensions to the area under cultivation, and the price of rubber remained at a profitable figure until the slump following the Great War.

Thus we see that the plantations rubber industry has grown to its present dimensions in the course of roughly the last twenty years, during which period all the problems of cultivating an originally wild product have presented themselves for solution. As you know, the rubber of commerce is prepared from a peculiar secretion of a white creamy substance formed in the latex cells between the outer bark of the tree and the skin separating the cells from the trunk, but the sap is, of course, an entirely different substance.

Plantation rubber is subject to different treatment. The bark is excised so as to start a flow of latex daily, or on alternate days; and the latex is coagulated into a mass by the addition of acetic acid, then rolled into sheets and either dried in a smoke house, which forms commercial smoked sheet, or simply dried and milled to form sheet or crepe rubber. It is obvious that the health of the tree and its continual yielding powers depend largely on the minimum of bark being removed, and tapping (as it is thus called) has tended in the light of experience to become more and more conservative.

FAILURE OF VOLUNTARY AGREEMENT.

In 1920 the price fell further to 10d. per lb., which represented only the average out-of-pocket cost of production, and in 1921 was down in the region of 7d. per lb. at which few, if any, estates could cover costs. In these circumstances an attempt was made by voluntary agreement amongst producers to bring about some restriction in the output, which appeared to be greatly in excess of requirements, but this was only partially successful, and the assistance of Government was accordingly invoked, with the result that the Colonial Office appointed a Committee under the Chairmanship of Sir James, now Lord Stevenson, to report upon the whole position.

(To be concluded next week)

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING MARCH, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	941	...	26	...	6	...	...	...
Calicut	39	...	166	1,504	3	...	...	3,736
Mangalore	945	...	2,745	7,442	3,879	...	...	321
Tellicherry	...	...	1,034	2,730	...	...	...	...
Bombay	...	...	401	1	568	...	...	...
Total	1,925	...	4,372	11,677	4,456	...	...	4,057
Previously	5,699	...	20,837	12,145	6,218	9	...	2,822
Total cwts. since 1-1-26.	7,624	...	25,209	23,822	10,674	9	...	6,879
<i>Rubber—</i>								
Calicut	...	121,576	147,829	...	...	...	...	...
Cochin	...	78,193	311,273	2,240	...	...	115,260	17,920
Mangalore	...	10,581	...	...	...	...	...	...
Tellicherry	...	980	16,450	...	...	...	...	...
Tuticorin	...	9,463	...	...	...	...	...	...
Alleppey	...	71,344	73,901	...	...	...	11,200	...
Total	...	292,137	549,453	2,240	...	...	126,460	17,920
Previously	...	1,283,466	873,213	40,009	...	...	315,827	17,920
Total lbs. since 1-1-26.	...	1,575,603	1,422,666	42,249	...	...	442,287	35,840
<i>Tea—</i>								
Madras	...	...	164,288	400	224	...	...	...
Calicut	43,137	66,853	1,489,452	288	720	...	...	...
Cochin	16,448	14,840	800,155	90	...	...	...	...
Mangalore	...	...	5,494	580	...	...	...	...
Tellicherry	735	3,640	124,183	...	...	...	...	...
Tuticorin	...	256,179	536,848	...	...	...	...	...
Alleppey	...	16,136	85,829	...	...	...	...	...
Total	60,320	357,648	3,206,249	1,358	944	...	...	...
Previously	526,006	3,941,291	33,065,896	1,058,801	10,153	8,735	83,828	1,950
Total lbs. since 1-4-25.	586,326	4,298,939	36,272,145	1,060,159	11,097	8,735	83,828	1,950

COMMERCIAL AND METEOROLOGICAL

1. The Rupee Exchange for the week ending May 1, 1926
Bank Selling Demand Draft on London

26th	27th	28th	29th	30th	1st
17 13/16d.	17 13/16d.	17 13/16d.	17 13/16d.	17 13/16d.	17 13/16d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending April 3, 1926	January 1 to April 3, 1926	January 1 to April 3, 1925
(A) TEA (WEEK ENDING APRIL 3, 1926)		s. d.		s. d.	s. d.	s. d.
(a) Anamalais—			N. India.	1 9·12	1 9·36	1 6·83
Sholayar ...	151	1 10	S. India	**1 10·55	††1 9·75	††1 6·43
Kallyar ...	66	1 10½	Ceylon...	1 11·23	1 10·42	1 8·16
			Java ...	No Sale	1 5·70	1 1·73
			Sumatra.	do.	1 7·87	1 4·67
			Nyassa-land.	do.	1 7·10	1 3·82
(b) Nilgiri-Wynaad—			Total ...	*1 9·84	†1 9·41	†1 6·66
Davershola ...	78	2 0				

(B) COFFEE

SPECIAL CABLE, LONDON, MAY 5, 1926
'A' QUALITY 147 s. MARKET FIRM

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, May 4, 1926, was 24¼ d.

** Based on 295 packages.

†† " " 50,916 "
†† " " 49,079 "

* Based on 24,143 packages.

† " " 935,207 "
† " " 688,746 "

(3) *Précis of reports on the London Market received on Monday, May 3, and covering the seven days ending Tuesday, April 13 :—*

(1) *Tea.*—Owing to the Easter Holidays there were no public auctions during the week ending April 10, and consequently no publication of the Indian Tea Association's Weekly Report. We therefore reproduce the prices obtained for the 295 packages of South India which were sold at the only auction which took place during the week ending April 3rd. We understand, however, that at the auction which was held on Monday, April 12, some 45,000 packages of South Indians were on offer and fetched prices equal to and in some cases slightly above those which obtained before the Holidays.

(2) *Rubber.*—The market remained weak during the 7 days under review and the stocks increased by 1,661 tons to 15,401 tons which is about the figure on the previous date last year.

(3) *Coffee.*—No South Indians were on offer at the public sales which reopened after the Holidays on April 13. Kenyans were quite firm and anything good sold really well; but London advices do not think the good prices realized can be safely taken as a criterion of the immediate future, as a good deal of Coffee was landed during Easter and consequently Buyers' requirements may soon be met.

III. Weekly Rainfall Statement

From Sunday, April 25, 1926, to Saturday, May 1, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	0.45	0.96	1.41	19. Coonoor ...	N.R.	0.76	N.R.
2. Kalthuritty.	1.14	3.65	4.79	20. Kotagiri ...	0.10	1.74	1.84
3. Tenmalai ...	0.65	4.41	5.06	21. Ootacamund	0.19	4.16	4.35
4. Mundakayam.	...	2.88	2.88	22. Yercaud ...	...	2.95	2.95
5. Peermade...	0.25	3.27	3.52	23. Devala ...	N.R.	0.56	N.R.
6. Twyford ...	N.R.	N.R.	N.R.	24. Gudalur ...	...	1.42	1.42
7. V'periyar ...	0.40	1.88	2.28	25. CALICUT ...	...	0.62	0.62
8. Kalaar ...	0.46	3.94	4.40	26. Kuttiyadi ...	...	1.18	1.18
9. Chittuvurrai	0.06	2.86	2.92	27. Vayittiri ...	0.76	0.22	0.98
10. BODI'KANUR	...	0.48	0.48	28. Manantoddi.	0.80	1.22	2.02
11. COCHIN ...	...	1.32	1.32	29. Billigiris ...	...	3.00	3.00
12. Mooply Valley.	...	0.54	0.54	30. Sidapur ...	1.17	1.73	2.90
13. Pachaimalai	N.R.	5.23	N.R.	31. Pollibetta...	...	1.48	1.48
14. Mudis ...	N.R.	N.R.	N.R.	32. Somwarpett	0.04	N.R.	N.R.
15. POLLACHIE.	0.14	2.31	2.47	33. Ballupete ...	0.18	0.11	0.29
16. Manjeri ...	...	0.01	0.01	34. MANGALORE.	...	0.71	0.71
17. Nilambur...	N.R.	...	N.R.	35. MADRAS ...	...	0.10	0.10
18. Naduvattam	0.10	0.82	0.92				

W = During the week.

P = Previously.

N.R. = No return.

N.B.—We are glad to note that the returns from Station No. 5 are now up to date; but, as No. 6 has fallen into arrears, there are still four Estate Stations—Nos. 6, 13, 14 and 32—whose figures are behind hand. Government Stations Nos. 17, 19 and 23 have sent in no returns for this week.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 20] SAT., MAY 15, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	317	Planting Produce in the London	
U.P.A.S.I. Annual Meeting ...	318	Market ...	327
District Association Meetings—		Soliloquy ...	330
Central Travancore ...	319	Commercial and Meteorolo-	
Nilgiri Wynaad ...	323	gical ...	331

EDITORIAL NOTES

We are advised by the Honorary Secretary of the U.P.A.S.I. Sports Club that the Committee have co-opted Mr. W. F. Inman of Carady Goody Estate, Vandiperiyar, to fill the vacancy caused by the late Mr. Dudley Cooper's lamented death.

*U. P. A. S. I.
Sports Club.*

We learn from the *Times of Ceylon* that Mr. T. Petch has arrived in the Island and assumed duties as the first Director of the recently inaugurated Tea Research Board. He has a temporary office at the Victoria Commemoration Buildings, Kandy, and is engaged on drawing up a detailed organization for the Scheme and attending to the necessary preliminaries; so that research work can be started immediately a building with suitable laboratory accommodation has been obtained.

*Ceylon Tea
Research
Scheme.*

Mr. W. Arthur Addinsell, a member of the Council of the Rubber Growers' Association, speaking as Chairman of the recent Annual Meeting of the Ratanui Rubber Estates, Limited, pointed out that the steadily increasing number of outside speculators operating in the rubber market have attained such large proportions that the total tonnage sold was now many times greater than the actual tonnage which the world produced. This he thought meant that, whenever the natural operation of the law of Supply and Demand tended to make the market weak, such tendency was greatly accentuated by the outside speculators throwing back their holdings on to the market so as to avoid being caught by a slump. The recent fall in price, he said, was doubtless largely to be thus accounted for; but he had no real misgivings regarding the immediate future, and considered that higher prices would shortly prevail.

*A Word of
Cheer.*

THE UNITED PLANTERS' ASSOCIATION OF SOUTHERN INDIA

(INCORPORATED).

The Thirty-third Annual General Meeting will be held at the Mayo Hall, Bangalore, commencing at 2-30 p.m. on Monday, August 23, 1926.

PRELIMINARY AGENDA

ORDINARY BUSINESS

1. The Chairman's Address.
2. Report of the Executive Committee.
3. Accounts.
4. Election of Chairman and Auditors.

SPECIAL BUSINESS

THE U. P. A. S. I.

5. U. P. A. S. I. Rules.
6. The Planters' Chronicle.
7. European Employees Provident Fund.
8. Indian Employees Provident Fund.
9. U. P. A. S. I. Sports Club.
10. Political Representation.
11. Upasi Buying Agency.
12. Affiliated Associations, etc.

LEGISLATION

13. The Planting Member.
14. Labour Laws.
15. Export of Indigenous Manures.

COMMUNICATIONS

16. Harbours.
17. Railways.
18. Roads.

LABOUR DEPARTMENT

19. The Director's Report.
20. Labour Rules.
21. The Labour Department.

GENERAL

22. Ross Institute of Tropical Diseases.
23. Tea.
24. Rubber.
25. Coffee.

SCIENTIFIC DEPARTMENT

26. General.
27. Rubber Mycologist Station.
28. Tea Specialist.
29. Tea Experimental Station.
30. Coffee Experimental Station.
31. BUDGET AND FINANCE.

Attention is drawn to Rule VI under which no subject other than those on the published Agenda shall be discussed except with consent of the Meeting, and no original proposition shall be made without the consent of the Meeting unless thirty days' notice stating objects and reasons has been given to the Secretary.

It is hoped that members will assist the Chairman in conducting the Meeting by giving as much notice as possible through the Secretary of all original propositions they propose to bring forward.

U. P. A. S. I. OFFICE,
MADRAS.
May 5, 1926.

H. WADDINGTON,
Secretary.

DISTRICT ASSOCIATION MEETINGS

A. CENTRAL TRAVANCORE PLANTERS' ASSOCIATION
(INCORPORATED)

Minutes of the Annual General Meeting held at 9.30 a.m. on April 24, 1926,
at the Peermade Club.

Present

Messrs. E. C. Sylvester (*Chairman*), J. H. Cantlay, B. P. Tailyour, W. F. Inman, A. R. St. George, C. J. Madden, J. F. Fraser, G. Newton, R. F. Vinen, J. S. Wilkie, A. B. Gordon Graham, W. S. Rowson, R. J. McMullin, J. M. Wilkie, C. Paterson, H. Gibbon and T. A. Kinmond (*Honorary Secretary*).

The notice calling the meeting, and agenda were read.

The minutes of last General Meeting were taken as read and confirmed. The minutes of the Committee Meeting held at Munjamullay Factory on January 30 were read and confirmed.

1. Chairman's Address

In view of the lengthy Agenda, the Chairman asked the meeting to excuse an address on this occasion. He made a few brief remarks on the yields for the past year; thanked the Honorary Secretaries, Messrs. Milner and Kinmond and also the Committee, for the assistance given on all occasions; and tendered his resignation.

2. Secretary's Report

Meetings.—During the past year under report, there have been four General Meetings, and three Committee Meetings.

Membership.—The Association consists of 28 estates with a planted acreage of 15,896.24 in tea and 22 in cardamoms, as against 26 estates last year with an acreage of 14,892.24. One estate has given notice of resigning the Association and three other Estates have applied for membership.

Crop.—On estates belonging to the Association (with an acreage of 15,178.98 mature tea) 8,577,993 lbs. were harvested or an average of 565 lbs. per acre. The total tea made in the District including outside estates was 9,953,767 lbs. as against 10,245,998 lbs. last year; showing a shortage of 292,231 lbs. This decrease in crop was chiefly due to Helopeltis, which was much worse than in previous years owing to a very mild South-West Monsoon.

Scientific Department.—We have to thank Mr. Munro for the very interesting lecture he gave us at the Experimental Station on March 24, and for his note of his tour in this district. There seems no doubt that alternative row pruning for Helopeltis is well worth trying, and I hope several estates will give it a trial.

Accounts.—These have been audited and are placed on the table and show an expenditure of Rs. 3,825-12-10, against an income of Rs. 3,591-4-0, or a loss for the year of Rs. 234-8-0. This is due to having paid the Madras Telephone Co. Rs. 545-2-0 for surveying charges. The printed copies only came from the printers yesterday, and are available here.

L. A. N. I. AND S. I. N. A.—Subscriptions collected amount to Rs. 237-8-0 but on to this must be added Rs. 275 which the T. T. E. Co., pay direct to the Fund. Total Rs. 512-8-0 against Rs. 425 last year.

P. B. Fund.—Rs. 345 was subscribed to this Fund, against Rs. 110 last year.

The Peermade L. M. Patrol is to be congratulated in winning the following cups :—

Goschen Cup

Orr Cup

The Murphy Cup was won by Mr. Mawer.

With thanks to the Chairman and Members of the Committee I now tender my resignation.

3. *Accounts.*—It was proposed by Mr. McMullin and seconded by Mr. St. George, that the accounts be passed. This was carried unanimously.

4. *Correspondence.*—Read letter from the Anamallai Planters' Association dated April 7, complaining that this Association sent no delegate to attend the tour of the recruiting area by the Control Committee of the Coimbatore Division. Mr. Inman, our delegate, who attended the Coimbatore Control Committee Meeting held at Ooty in February informed the Meeting that he told them at that meeting we should not be sending a delegate for the tour.

The Honorary Secretary was instructed to reply pointing this out. It was proposed by the Chair, 'That notices of all Control Committee Meetings be notified to Honorary Secretaries of District Associations in future, as well as to Control Committee Members.' This was carried unanimously.

Read letter from the Superintendent, Vaghamon Estate, dated March 9, 1926, asking what cess he would have to pay to join the Association, as it was a new estate only opening this year. The Honorary Secretary informed the Meeting that he had referred to the U. P. A. S. I. who had replied 'A new estate can join by paying subscription on the area it is proposed to open this year'.

The Honorary Secretary was instructed to write accordingly and if Vaghamon agreed to pay cess on 1926 planted area, the estate was elected a member of the Association. This was carried unanimously.

Read letter dated March 10, from the Mundakayam Planters' Association *re* 'Pounds'. The Honorary Secretary was instructed to reply thanking them for their letter, and that the meeting hoped the new proposals would be effective in keeping stray cattle off the roads.

Read letter dated March 6, from the Director of Labour *re* 'Terms of employment of European Employees'. The new scale of pay was thoroughly discussed and it was then proposed by the Chair and seconded by Mr. J. S. Wilkie :—

(1) That Junior Superintendents' pay remains the same as it is, commencing Rs. 300 and that we approve of proposed new scale of pay to Senior Superintendents starting on Rs. 600 per mensem. It is understood that the revised scale of pay shall date from April 1, 1926.

(2) That we approve of the new draft rules, so far as they effect furlough.

(3) That we do not agree to the one month's casual leave being added to the home furlough.

(4) That the wives of married employees shall be granted free return passages, when their husbands' home furlough becomes due, and not once every five years as proposed.

(5) That rules regarding payment of medical attendance, etc., should be framed by the Executive Committee and submitted for consideration.

This was passed unanimously.

Read letter from the Police Commissioner dated February 25, *re* 'Tea Thefts'. The Honorary Secretary was instructed to write thanking him for the action taken. It was true that thefts of tea had decreased which was evidently due to the good work done by the Police, and it was hoped he would be able to continue the steps taken already.

Read letter dated December 15, 1925, from the Labour Department Palamcotta *re* 'Bus Transport of coolies from Nagercoil to Kottayam'. The Honorary Secretary read his reply dated January 6, which stated that the Association approved of the scheme provided it could be done for Rs. 4 per adult. As no reply had been received to this letter, the Honorary Secretary was instructed to write again.

Read letter dated December 31, 1925, from the Superintendent of Carady Goody Estate saying that the proprietors of the estate wished to discontinue to belong to the U.P.A.S.I. and Labour Department.

The meeting expressed its regret at the decision of the Proprietors of Carady Goody Estate to resign the Planters' Association, and they hoped that they would reconsider their decision.

Read letter from Mr. Farley, dated January 15, *re* subscriptions to Earl Haig's Fund for distressed ex-service men being collected through the Association. It was decided that these would best be collected through the Officer Commanding Peermade L. M. Patrol.

Read letter, dated April 12, from the Travancore Combined Planters' Association informing us that Mr. Abraham of Trivandrum had been engaged to peruse all Government Publications and to pass on any information, which might be of interest to the Planting Community. The Honorary Secretary was instructed to thank them for their letter; but also to ask that matters of any particular interest to any individual estate, such as sale of land, royal trees, etc., should also be noted and referred to the Association concerned.

Read letter, dated 10th instant from Mr. Madden, Honorary Secretary of the Peermade Road Committee, pointing out the heavy loss incurred in upkeeping the district roads. Mr. Madden then proposed the following resolution:—

'That this Association be asked to approach Government to raise the grant for the grant-in-aid roads to Rs. 250 per mile all over, with the exception of the 1st mile Cardamon Hill Road, as the present grant is totally inadequate.'

Mr. Fraser seconded the resolution which was carried unanimously.

Read letter, dated March 10, from Mr. Mackenzie *re* 'Empire Planters' Club'. Several members agreed to support the Club and also two members expressed willingness to serve on the Committee. The Honorary Secretary was instructed to forward names to Mr. Mackenzie.

Read the U.P.A.S.I. Secretary's letter dated December 9, appealing for funds to the Planters' Benevolent Fund. Rs. 170 was subscribed at the meeting. The Honorary Secretary was instructed to write to the Secretary, U.P.A.S.I., asking him to approach the South Indian Association, London, with a view to obtaining donations to the Planters' Benevolent Fund from the Companies and Private Proprietors interested.

Read Mr. Munro's letter, dated April 10, and report of his tour in this district in March. The meeting passed a hearty vote of thanks to Mr. Munro for his very interesting demonstration held at the Peermade Experimental Station on March 24, and for his report. The Honorary Secretary was instructed to write asking which of the trees recommended, in place of Gums would stand coppicing, and where seeds could be obtained; also that when tours are being arranged in future, the Association would like, if possible, at least a fortnight's notice so that the necessary arrangements could be made.

5. *Sri Mulam Popular Assembly*.—Subjects were:—Cattle pounds and shooting licenses. Mr. McMullin gave his report at the meeting. A vote of thanks was passed to Mr. McMullin for attending as delegate and his expenses passed.

6. *Ootacamund Meeting, February 1926*.—The minutes of this meeting were published in the *Planters' Chronicle* of March 6. Mr. Inman, our delegate, answered any questions put by the meeting and a hearty vote of thanks to him was passed as well as his expenses.

7. *U.P.A.S.I. Tennis Cup*. Mr. Inman and Mr. Farley were thanked for representing the district and their expenses passed.

8. *Election of Office Bearers*.—The following were unanimously elected for the coming year:—

	Mr. E. C. Sylvester :	<i>Chairman.</i>
	„ G. S. H. Ford :	<i>Honorary Secretary.</i>
1.	„ J. S. Wilkie	} <i>Committee.</i>
2.	„ A. R. St. George	
3.	„ R. F. Vinen	
4.	„ B. P. Tailyour	
5.	„ R. J. McMullin	
6.	„ T. A. Kinmond	

Election of Control Committees.—

SRIVILLIPUTTUR

Active.
Mr. B. P. Tailyour.

Member-in-waiting.
Mr. C. Newton.

COIMBATORE

Mr. H. Clarke.

Mr. R. J. McMullin.

PALAMCOTTAH

Mr. J. S. Wilkie.

Mr. M. A. Mactavish.

U. P. A. S. I. General Committee : Messrs. E. C. Sylvester and J. S. Wilkie.

Auditor : Mr. Vadivel Pillay.

District Sports' Committee : The Honorary Secretaries of the two clubs and Messrs. F. Bissett, J. M. Wilkie, and A. H. J. How (*Secretary*).

UPASI Sports Representative : Mr. W. F. Inman.

Standing Labour Committee : To be the same members as P. A. Committee.

9. *1926/27 Cess*.—It was unanimously agreed that the Cess be the same for the coming year, viz :—3½ as. per acre.

It was also agreed that a special clerk be employed by the Honorary Secretary on a salary not to exceed Rs. 50 per month.

10. *Bonami Sub Post Office*.—The Honorary Secretary read Mr. Roissier's letter, dated April 3, agreeing to do all necessary correspondence on behalf of the Association. A vote of thanks was accorded to Mr. Roissier for the trouble he was taking in the matter, and it was hoped that the much needed post office would be working before the Monsoon.

11. *Bazaarmen*.—That the resolution passed at the last General Meeting should be altered to read :—' shall be turned out ' and not ' liable to be turned out '. *Passed unanimously*.

12. *Issue of Rice to Coolies*.—After a lengthy discussion the meeting unanimously agreed ' that any increase in the price of rice to the coolie, would be most undesirable, and seriously effect the good name the District has obtained in recruiting areas.

13. *Game Association*.—Mr. Inman informed the meeting that he had seen the Commissioner, who had agreed to serve on the Committee. That it had been decided to draw up rules, similar to the Nilgiri's Game Rules, provided cost of license was reduced, and the money obtained from licenses used entirely for looking after the preservation of Game. 14 members agreed to take out licenses.

14. *Telephones*.—Mr. Inman informed the meeting of what had been done.

A vote of thanks was passed to M. Roissier for allowing the Club to be used for the meeting.

The meeting closed with a vote of thanks to the Chair and to the Honorary Secretary.

T. A. KINMOND,
Honorary Secretary.

E. C. SYLVESTER,
Chairman.

B. NILGIRI-WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Eighth Annual General Meeting of the above Association,
held at Gudalur on Tuesday, April 27, 1926

Present

P. A. Naylor, Esq. (*Chairman*), Messrs. M. J. Wright, J. H. Will, A. N. Scot-Hart, J. F. Smail, J. C. Nicolls, G. W. Fulcher, F. Farmer, J. Trafford, R. Fowke, C. O. Commin, and D. Mackintosh (*Honorary Secretary*).

The Proceedings of the Last Meeting having been published in ' The Planters' Chronicle ' were taken as read and confirmed.

The Chairman then read his report for the year, which was as follows :

GENTLEMEN,

Your Chairman Mr. R. Fowke having been elected Chairman, of the U.P.A.S.I. at the Annual Meeting in Bangalore last August, I automatically filled the vacancy to the best of my ability. This is the first occasion on which the presenting of a report has devolved on me, as last year I was

on furlough, and I naturally feel rather diffident in making one at all and shall consequently be as brief as possible. This I feel sure, Gentlemen, is what you would wish as our hardworking Honorary Secretary will as usual cover all the most interesting items in his report.

Products.—The past year has been a good one for Tea, both as regards crop and prices, and the latter seem likely to keep at a good remunerative figure for some time to come. Rubber had a short boom and prices have been very good taking the average for the year; and I think we will all agree that it was more than time Rubber had a period of prosperity after the number of consecutive lean years it has passed through.

Coffee.—The prices for this commodity have been from fair to good during the year, but crops so far as our district was concerned were short. The blossom this year was a good one and prospects of a considerably better crop are quite bright.

Roads.—I regret that our roads generally were in a backward condition throughout the year despite frequent complaints, but metal is being broken and spread, and will be consolidated as soon as the weather conditions allow. I am of the opinion that the special District Board Meeting recently inaugurated, and held after the ordinary District Board Meetings, will prove of great service in keeping works in the district up to date.

Nadghannie Ghaut.—This outlet is still closed to traffic and is likely to be for some time to come; though work is proceeding on it, and we hope before the Monsoon of 1927 to be again sending our produce to the Coast by this, our shortest route.

Nellacotta-Sultans Battery Road.—Work on the Malabar portion is being pushed on, but little if anything has been done so far on our portion of this section of Road.

Gudalur-Sholadi Bridge.—The section of this road from Devala to the Malabar section is in a bad state, and special repair work should be put in hand at an early date. It is likely if the next Monsoon is a heavy one that this outlet will be impassable on the above section.

Finance.—Last year your Chairman remarked on the Association running accounts too fine as regards finances, and I regret that our audited accounts are not yet before you. The reason for this is that our Auditor died and a new one had to be found. However our accounts show a reasonably larger income than expenditure as our Honorary Secretary will explain and I think we can therefore congratulate ourselves on finding an increased subscription unnecessary. The audited accounts will be ready by our next Meeting.

Act 13 of 1859.—This Act was repealed as from the 1st instant, and the Act under which we work—Act 1 of 1903—may be replaced by another in the not very distant future, judging from the question having been discussed recently at Madras.

Annual Sports Week.—Our very hearty thanks are due to all the Members of the Sports Committee, and especially to the Upasi Sports Club's indefatigable Honorary Secretary, Mr. Fulcher, and other willing helpers who made The 'Week' such an enjoyable one from every point of view.

Gentlemen, in conclusion I wish to thank our Honorary Secretary for all the work he has done for us during the past season ; and thanking you for the courtesy which you have always shown me as your Chairman, I now place my resignation in your hands.

Honorary Secretary's Report, for season 1925-26

GENTLEMEN,

Our Membership and acreage is gradually swelling as you will observe from the following figures :—

Membership and Acreage.—The number of Estates in our Books are sixteen or two more than last year.

Personal Members have increased from thirteen to twenty-two, which I largely put down to the inducements offered by the U.P.A.S.I. Sports Club.

The Subscribing area for the season has been 11,825 acres against 11,580 last year, or an increase of 245 acres, and in 1926 I have so far been notified that a further 599 acres New Clearings are coming in.

Meetings.—Six General and three Committee Meetings were held during the year : the average attendance being fourteen and six respectively.

Finance.—I regret that the audited accounts for the season have not yet been received from the Auditor. However, Gentlemen, I am glad to inform you that we are in quite a sound financial position.

General.—It is unnecessary for me to go into details of the business which has been done during the year, as our Chairman has already dealt with this.

I would take this opportunity, Gentlemen, of thanking each and every Member of the Association, particularly the two Chairmen (Messrs Fowke and Naylor) for the help they have given me, in carrying out my duties as Honorary Secretary.

I now, Gentlemen, place my resignation in your hands, and through pressure of work, do not stand for re-election.

Cash on Estates.—Mr. Waddington's Circular of April 3, was read ; and the following Resolution was proposed from the Chair and carried unanimously :—

' *Resolved* : That this Association is in favour of the proposed scheme
' of supply Bills at Local Treasuries to meet estate Cash require-
' ments, provided that small change is obtainable in adequate
' amounts.'

Alteration of the Articles of Association.—The following Resolution proposed by Mr. G. W. Fulcher, and seconded by Mr. D. Mackintosh, which was passed at an Extraordinary General Meeting of the above Association held at Gudalur on March 29 last, was unanimously confirmed :—

Resolved : That the Articles of Association be altered in manner following :—

' That in Article No. 7 the words " Rupees Five " shall be substituted
' for the words " Rupees Twelve."'

U. P. A. S. I. Scientific Department.—Mr. Waddington's letter and Circular of March 12 last was read, and the matter was discussed and recorded.

Labour Department. Rules of European Employers' Provident Fund.—At the last Meeting this matter was brought up, and the Honorary Secretary instructed to apply for more copies of the proposed scheme, to circulate to Members of this Association. Up to the time of this Meeting, no reply had been received; and the Honorary Secretary was again instructed to apply for extra copies.

Columbo-Labour Control Committee.—The Annamallai Planters' Association Honorary Secretary's letter of April 7, re proposed Tour of Recruiting area by Control Committee was read and the subject matter fully discussed.

Terms of Employment of European Employers.—This matter was carefully gone into and the opinion of the Meeting was that the scale of pay for the first four years as per Major Brock's Circular was too high and an alternative scale was suggested which the Honorary Secretary was instructed to embody in a letter to the Director.

Wynnad Re-Settlement Survey.—Messrs. Fulcher, Naylor, and R. M. Nicolls waited upon the Collector of the Nilgiris on the above subject and fully discussed the matter with him, for which they were heartily thanked by the Meeting.

Correspondence.—Read letters from Messrs. The Malayalam Plantations, Limited; Fraser and Ross; The Estates Agency Company, Limited; and Mrs. Cooper.

Election of Office-Bearers.—The following Gentlemen were elected:—

Mr. J. Aird, Glenvans Estate, New Hope P. O. : *Chairman.*

Mr. P. A. Naylor, Mayfield Estate, Neillacotta, P. O. : *Vice-Chairman.*

Mr. F. Farmer, Mango Range Estate, Mango Range P. O. : *Honorary Secretary.*

N. W. P. A. Committee :

Mr. G. W. Fulcher, Woodbriar Estate, Daverashola P. O.

Mr. D. Mackintosh, Periasshola Estate, Gudalur P. O.

Mr. R. M. Nicolls, Daverashola Estate, Daverashola P. O.

U. P. A. S. I. General Committee and Bangalore Delegates :

Mr. J. Aird, Glenvans Estate, New Hope P. O.

Mr. G. W. Fulcher, Woodbriar Estate, Daverashola P. O.

General.—Mr. R. Fowke proposed, and Mr. G. W. Fulcher seconded, a very hearty vote of thanks to our retiring Chairman (Mr. P. A. Naylor) and Honorary Secretary (Mr. D. Mackintosh) for the work they had done for the Association during the year.

Mr. Naylor suitably responded.

With a hearty vote of thanks to the chair the Meeting terminated.

D. MACKINTOSH,
Honorary Secretary.

P. A. NAYLOR,
Chairman.

PLANTING PRODUCE

IN THE

LONDON MARKET

January-March 1926

Messrs. Leslie and Anderson send us by this week's Mail the following very interesting review, dated March 31, 1926, of the London Market for Planting Produce during the first quarter of the current year :—

COFFEE

The improvement in the market mentioned in our last Review continued in January, resulting in a firm market until arrivals of Costa Rica, East Indias and East Africas increased. Buyers then became more reserved and were inclined to mark time awaiting a lower level of prices, which occurred. The chief feature of the season has been, with exceptions, the general unsatisfactory quality of the EAST INDIA and East Africa Coffees—the falling off in colour being most noticeable. A few of the crack Mysore marks have maintained their reputations and obtained full prices but even these shipments were not in appearance really up to their standards of previous years. The Nilgiri Coffees taken all round have been below average, while Coorgs have on the whole turned out the nearest to average types.

Public Auctions were discontinued on 23rd instant for the Easter Recess, and will not be resumed until April 13. This, we think, is a good move enabling Buyers to digest their recent purchases before entertaining further business. With very little more Kenya and East India coffee to market, we look for a steady tone when the Auctions are resumed.

Bukoba Plantation (New Crop).—We have not yet heard of any sales; we hardly expect to do business this year at prices current a year ago, seeing there has been a fair quantity of Kenyas and other Coffees of low grade available at 90 to 100 per cwt. landed terms. With more care in cleaning and exclusion of blacks, brokens and impurities this coffee would, we feel sure, increase in favour for blending purposes on the Continent.

Brazilian Crops.—The position in regard to these is unchanged. World's consumption figures for the year ending June 30, 1926, are likely to be satisfactory, viz., about 21,000,000 bags. If this is so, invisible stocks must have been drawn on and reduced to a moderate figure. Reports as to the out-turn of the 1925-6 Crop are conflicting.

In their March (monthly) Review the Bank of London and South America published the following paragraph dated Rio de Janeiro, February 8 :—

'The reports on the coffee crops show little change. The severe drought during the first half of the current 1925-6 crop seriously affected the development of the 1926-7 crop. The drought was followed by very heavy rains, which in their turn did much harm to crops in San Paulo. In the circumstances, the previous reports of smaller coffee crops are confirmed, indications pointing to an eight million bags crop in San Paulo for 1926-7'

On the other hand reports reach this market that the Santos 1925-6 crop is estimated at 10 million bags and other Brazilian crops at about 3½ millions. Even if the latter estimate is nearer the actual out-turn, we cannot see that there will be any unwieldy surplus for the season 1926-7, so we are inclined, to hope for a continuance of the present level of prices.

We may mention that the Valorization Loan declined by the American financiers at the end of 1925—referred to in our last Review—was successfully floated in London, so that the Brazilian Coffee Defence Commission should now be well equipped with funds enabling them to assist Planters when coffee is held back and to support the market by purchases in Santos if values show a tendency to decline.

We quote spot prices current in London as follows :—

East India—Good to Fine	... 'A' size—	135/- to 150/- per cwt.
do. Medium	... do.	120/- „ 135/- „
Costa Rica—Good to Fine	... do.	140/- „ 170/- „
do. Ordinary to Medium	... do.	110/- „ 135/- „
Kenya—Good to Fine	... ..	112/- „ 135/- „
do. Medium	... ..	95/- „ 110/- „
Santos Superior C & F.	... ..	100/- „

Statement of the Imports, Deliveries, and Stocks of Coffee at the Port of London for the First 12 weeks of the year 1926

	Landed.		Home Cons.		Export.		Stock.		
	1926	1925	1926	1925	1926	1925	1926	1925	1924
COFFEE—									
British West									
India ... tons	38	39	21	16	47	3	55	72	24
British East									
India ...	752	1,142	408	155	425	49	1,585	989	246
Total British Plantation...	790	1,181	429	171	472	52	1,640	1,061	270
Mocha ...	30	306	125	129	32	109	150	417	200
Foreign East									
India ...	80	657	172	426	29	25	470	742	161
Brazil ...	161	231	227	242	258	33	783	698	593
Colombian ...	100	341	156	263	290	115	373	489	127
Costa Rica ...	5,934	4,654	1,535	1,266	1,609	890	4,634	3,637	2,704
Guatemala, etc.	97	197	110	104	316	107	364	351	802
African ...	3,742	2,235	1,818	1,624	841	282	3,603	2,658	2,261
Total Foreign...	10,144	* 9,621	4,143	4,054	3,375	1,561	10,377	8,992	6,848
Grand Total ...	10,934	* 10,802	4,572	4,225	3,847	1,613	12,017	10,053	7,118

* (N.B.—These figures are each one thousand more than the sum of the details whose total they are supposed to represent; but as we have no copy of Messrs. Leslie and Anderson's report for the first quarter of 1925, we are unable to say whether it is the details or the totals that have been incorrectly shown in the statement given above. Ed.)

PEPPER

In 1925 shipments from producing countries were about 41,000 tons but deliveries were 44,000 tons. Supplies in the Far East are now reported as small, so it is probable buying for consuming countries must be done here, pending the arrival of the New Crop. It is now evident the speculative account in pepper has been of large dimensions or prices would not have risen and fallen so greatly—current prices probably reflect fair values on the shortage.

We quote :—

TELLICHERRY BLACK, Spot ...	1/1 per lb .
do. March/May shipment ...	107/6 per cwt. C.F.I.
ALLEPPEY BLACK, March/May shipment ...	107/6 „ „

CARDAMOMS

Prices for 'bleached' have been well maintained despite the large supplies of 'Greens.' We have been fortunate in having no competitive supplies for the past month or two for our consignment of East India Plantation which have realized good prices, but fair arrivals from Ceylon are now available; these sold to date have realized full values, but we fear prices are now likely to give way to some extent.

We quote :—

MYSORE PLANTATION (Cured) Spot Bold...	7s.	to 7s. 9d.	per lb.
Do. „ Spot Reds			
	and Splits	4s. 6d.	„ 5s. „
Do. „ Spot Smalls	4s. 6d.		„
MALABAR „ Spot Bold...	5s.	„ 6s.	„
ALLEPPEY GREENS (C.F.I. Terms) ..	4s.		„

TEA

As anticipated in our last Review prices have been maintained and even advanced owing to the shortage of supply being more than expected. The tons of the market is at times irregular according to local trade variations, but we see no reason for any serious decline in values until New Crop prospects in Northern India have to be considered.

Southern India teas at last Auctions showed average prices from 1/7½ for Wynaad to 1/10½ per lb. for higher grown teas.

RUBBER

Prices have declined rather more quickly than we anticipated due in part to 'bear' selling and a quieter trade in America, but after touching 2/1 per lb., there was a recovery to 2/8 per lb. for spot, due to 'shorts' covering and a general belief that despite 100% production supplies have not as yet increased to show a large surplus over probable consumption.

The statement published in the *Times*, dated New York, March 22nd, giving figures of the U. S. Motor Industry, show an astounding expansion in the industry, the chief feature being the information that retail sales of motor cars for the current season show an increase of from 25 to 30 per cent over the previous season.

We quote :—

PLANTATION SMOKED SHEETS, Spot	... 2/5 per lb.
Do. Equal Monthly Deliveries, April/June ...	2/4½ „
Do. do. July/December	2/4½ „
London Stock 12,797 tons—same date last year, 18,018 tons.	

SOLILOQUY

(With apologies to the Baroness Orczy)

Written in the field at noon on Labour Day, whilst in mournful contemplation of the umpteenth breakdown that morning.

We seek it here, we seek it there,
The perfect non-stop rubber sprayer :
Is there in heaven, is there in hell
A sprayer that will function well ?

I wonder.

I mend 'em here, I mend 'em there,
The Blacksmith mends them everywhere ;
Is it a washer, is it a cup
That holds the coolies all stuck up ?

I wonder.

I blaspheme here, I blaspheme there,
The ' P. D. ' blasphemes everywhere ;
Is it the sulphate, is it the lime,
Or HAYES or FLETCHER'S dud design ?

I wonder.

There's Bordeaux here, there's Bordeaux there,
It's in my eyes, nose—everywhere ;
But is't on verdure way up on high,
Where nozzles cannot mystify ?

I wonder.

From early March, till monsoon breaks,
Each day more stops ; each hour more aches :
Is it misfortune ? Or expiation ?
For 9 months sin—3 months damnation ?

I wonder.

They call me here, they call me there,
I can't be ev'ry blooming where ;
IS THERE IN HEAVEN, IS THERE * * ?

* * * * *

I wonder.

EMSEY.

(Note by Editor -

We'd sought him here, We'd sought him there,
—The Planter with poetic *flair*—
But failed to find him any where :

' Emsey ', you've saved us from despair,

You wonder ! Ed.)

LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.

COMMERCIAL AND METEOROLOGICAL

1. The Rupee Exchange for the week ending May 8, 1926

Bank Selling Demand Draft on London

3rd	4th	5th	6th	7th	8th
17 27/32d.	17 27/32d.	17 27/32d.	17 27/32d.	17 7/8d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending April 17, 1926	January 1 to April 17, 1926	January 1 to April 17, 1925
		s. d.		s. d.	s. d.	s. d.
'A' TEA (WEEK ENDING APRIL 17, 1926)			N. India.	1 9·06	1 9·34	1 6·83
			S. India	**1 10·08	††1 9·77	††1 6·43
			Ceylon...	1 11·17	1 10·48	1 8·16
(a) Anamalais—			Java ...	1 5·66	1 5·69	1 1·73
Thayamudi ...	343	1 10 $\frac{3}{4}$	Sumatra.	1 7·06	1 7·80	1 4·67
Mukkotumudi ...	160	1 10 $\frac{1}{4}$	Nyassa-	1 7·05	1 7·09	1 3·82
Kallyar ...	128	1 10 $\frac{1}{4}$	land.			
Pannimade ...	113	1 9	Total ...	*1 9·14	†1 9·38	†1 6·66
(b) Central Travancore.						
Twyford and Ashley.	140	1 10 $\frac{1}{2}$				
Fairfield ...	135	1 10				
Bonami ...	85	1 9 $\frac{1}{2}$				
Glenmary ...	70	1 9 $\frac{1}{2}$				
(c) Kanan Devans—						
Perriavurrai ...	239	2 0 $\frac{1}{4}$				
Letchmi ...	190	1 11 $\frac{1}{4}$				
Chockanad ...	150	1 11 $\frac{1}{4}$				
Gundumallay ...	57	1 11				
(d) Nilgiris—						
Woodlands ...	83	2 1 $\frac{1}{4}$				
Bhawani ...	147	1 11				
Craigmore ...	145	1 9 $\frac{3}{4}$				
(e) Nilgiri-Wynaad—						
Seaforth ...	97	1 10				
(f) South Travancore—						
Poonmudi ...	82	1 8 $\frac{3}{4}$				
Braemore ...	78	1 8 $\frac{3}{4}$				
Merchiston ...	83	1 8 $\frac{1}{2}$				

(B) COFFEE

SPECIAL CABLE, LONDON, MAY 12, 1926

'A' QUALITY 147 s. MARKET FIRM

London Prices (seven days ending April 20, 1926)

	bgs.	s. d.	Grades.
Mysore—			
Santaveri ...	58	152 9	1,2,3, PB&T.
Bellagodoo ...	20	138 8	Do.
Ubban ...	74	135 3	2,3, P B & T.
Soondhully and Luc-koonda. }	72	133 6	1,2,3, PB&T.
Kelagoor ...	40	123 6	1,2,3, & P. B.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, May 11, 1926, was 23 $\frac{1}{2}$ d.

** Based on 4,299 packages.

†† " " 55,215 "

†† " " 49,079 "

* Based on 83,452 packages.

† " " 1,018,659 "

† " " 688,746 "

(d) *Précis of reports on the London Market received on Monday, May 10, and covering the seven days ending Tuesday, April 20 :—*

(1) *Tea.*—On Wednesday, 14th ultimo, there was a slight falling off in the keenness of the very brisk demand which characterized the market when it re-opened after the Easter Holidays on Monday, April 12, but this tendency towards weakness did not affect the higher grades; and, as is shown on the previous page, two South Indian parcels fetched over 2s., two realized 1s. 11½d., two more obtained 1s. 11d. and several more were within 1d. of that price. The total bonded stocks on March 31, 1926, were 195,388,000 lbs. against 228,108,000 lbs. on the same date in 1925.

(2) *Rubber.*—During the period under review stocks increased by 1,653 tons to 17,054 tons; and very little business was done as holders were not anxious to sell at the prices which buyers were willing to bid. On Tuesday, April 20, the 'Spot' quotation was 22½d. to 23d.

(3) *Coffee.*—The market remained fairly steady, despite the fact that offerings were in excess of demand; and, as indicated on the previous page, some of the Mysore Coffee fetched a very good price.

III. Weekly Rainfall Statement

From Sunday, May 2, 1926, to Saturday, May 8, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	1.61	1.41	3.02	19. Coonoor ...	1.21	0.92	2.13
2. Kalthuritty.	0.80	4.79	5.59	20. Kotagiri ...	0.09	1.84	1.93
3. Tenmalai ...	1.10	5.06	6.16	21. Ootacamund	2.45	4.35	6.80
4. Mundakayam.	N.R.	2.88	N.R.	22. Yercaud ...	0.06	2.95	3.01
5. Peermade...	1.55	3.52	5.07	23. Devala ...	N.R.	0.56	N.R.
6. Twyford ...	1.11	4.12	5.23	24. Gudalur ...	0.27	1.42	1.69
7. V'periyar ...	0.55	2.28	2.83	25. CALICUT ...	0.77	0.62	1.39
8. Kalaar ...	1.31	4.40	5.71	26. Kuttiyadi ...	1.37	1.18	2.55
9. Chittuvurrai	0.59	2.92	3.51	27. Vayittiri ...	2.30	0.98	3.28
10. BODI'KANUR	1.41	0.48	1.89	28. Manantoddi.	0.94	2.02	2.96
11. COCHIN ...	0.38	1.32	1.70	29. Billigiris ...	0.93	3.00	3.93
12. Moolly Valley.	3.68	0.54	4.22	30. Sidapur ...	1.11	2.90	4.01
13. Pachaimalai	N.R.	N.R.	N.R.	31. Pollibetta...	1.09	1.48	2.57
14. Mudis ...	1.35	2.98	4.33	32. Somwarpett	1.21	N.R.	N.R.
15. POLLACHIE.	0.15	2.47	2.62	33. Ballupete ...	N.R.	0.29	N.R.
16. Manjeri ...	0.24	0.01	0.25	34. MANGALORE.	...	0.71	0.71
17. Nilambur...	0.21	N.R.	N.R.	35. MADRAS ...	...	0.10	0.10
18. Naduvattam	0.85	0.92	1.77				

W = During the week.

P = Previously.

N.R. = No return.

(from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 21] SAT., MAY 22, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	333	The Economics of Rubber ...	341
District Association Meetings—		Exports of Indigenous Manures	
Nelliampathy P. A. ...	335	from Madras Presidency ...	343
Mundakayam P. A. ...	336	Commercial and Meteorolo-	
Mundakayam P. A. Manage-		gical ...	347
ment Committee's 1925-6			
Report ...	347		

EDITORIAL NOTES

Want of space has precluded us from reproducing more than a few of the extracts most likely to be of interest to the Planting Community at large from the Report for the year ending March 30, 1926, which the Managing Committee presented to the Mundakayam Planters' Association in General Meeting assembled on the 8th instant; but we are sure that the members themselves as they perused the report *in extenso* and realized the wide range and comprehensiveness of the activities recorded, must have been very sensible of the wholeheartedness and disregard of personal inconvenience with which those whom they had elected to Office had carried out their honorary and public spirited work. We trust time will prove that the optimism expressed by the Chairman in his address was thoroughly justified and that the Rubber Planters of Travancore will not find themselves heavily handicapped by having to meet a tax from which the Government itself by Regulation V of 1100 gave them exemption only a little over a year ago.

During the week we have been the interesting recipients of a copy of the report for the sixteen months ending April 30, 1926, which the Honorary Secretary Mr. C. N. D. Ambrose presented at the Ninth Anniversary Meeting of the Devarshola United Club which was held in the Club premises on Sunday the 9th inst. with the Patron, Mr. R. M. Nicolls, in the chair. That the condition of the Club is very very far removed from the lethargic state into which many institutions of its type lapse as soon as the original enthusiasm of its founders has worn off is evidenced by the fact that the membership increased by ten during the period under review; despite the transfer of eight members and the unfortunate secession *en bloc* of seven members employed on Mayfield Estate. In addition to the increase in membership, the Secretary was able to report several extensions to the Club building, and additions to the furniture and appointments thereof. The outdoor activities of the members comprise Tennis, Badminton, Volley Ball and an occasional 'Sports'

programme ; indoor facilities for Chess, Draughts, Ping Pong and Card Games are afforded ; while two Newspapers are subscribed for, and a number of Magazines regularly presented by Mr. Fulcher and others to the Club. The Closing Balance at the end of April was no less than Rs. 540— and, though it is but natural that the members of such an enthusiastic institution should be desirous of effecting many further improvements in their premises and its appointments, yet their satisfactory little nest egg should not have to be unduly depleted since we notice that the Patron Mr. R. M. Nicolls in his speech at the meeting announced that his Company proposed during the coming year to present additional furniture and a new Badminton Court to the Club. The members will doubtless appreciate these benefactions as a hall mark of the Davershola Company's approval and determine to show by their activities during the current year that that approval continues to be thoroughly well deserved.

A fortnight ago we published the results of the Tennis Tournament held at Pollibetta at the end of last month, and indicated that J. Irwin and Capt. Morris tied with J. O. F. Maurice and J. H. Sprott in the Men's Doubles : each pair winning 45 games. Our Honorary Correspondent now informs us that when the tie was subsequently played off Maurice and Sprott got 6 games out of 11 against Morris's and Irwin's 5, and consequently carried off the two cups. In the Mixed Doubles the two sets of partners who had not played off their games decided that there was no object in continuing to a finish as they had no chance of beating Mrs. Magniac and Irwin who consequently were declared the winners with 49 games.

The following notification of the Government of India in the Department of Education, Health and Lands, headed 'Overseas' and dated No. 300, Simla April 23, 1926, is republished in the *Fort St. George Gazette* of the 18th of this month :—
Poll Tax on Emigrants to Ceylon 'In pursuance of Rule 50 of the Indian Emigration Rules, 1923, and in modification of so much of Notification, No. 214, dated March 10, 1923, of the Department of Revenue and Agriculture as relates to Ceylon, the Governor-General in Council is pleased, with effect from May 1, 1926, to prescribe one rupee and eight annas as the fee to be levied in respect of each emigrant permitted by the Protector of Emigrants to embark for Ceylon.'

Sir Charles Higham who, with Mr. Gerald Kingsley the Chairman of the Indian Tea Association in London, arrived in New York on the Leviathan on the 5th ultimo asserts that those Americans who have hitherto opposed Prohibition because it involved either bootlegging on the one hand or the sacrifice of their wonted 'toot' on the other would find that the dilemma in which they are placed is by no means so serious as would appear at first sight if only they would adopt the beverage which he recommends. Here is his recipe :—
Tea to the Fourth Power

'Tea is made in ordinary way, except that four times the amount is put in for the same amount of infusion ; that is, instead of putting one teaspoonful of tea into the pot for each cup of tea, four teaspoonfuls are put in for each cup, and are steeped for four or five minutes. The tea then is poured in bottles and used in the place of whisky, with soda and ice. This makes a most stimulating drink without having any after stomachic effects or heart effects, and is as exhilarating as it is palatable. Any American man who tries it for a week or two will no longer be interested in bootlegging.'

DISTRICT ASSOCIATION MEETINGS

A. THE NELLIAMPATHY PLANTERS' ASSOCIATION

Proceedings of a General Meeting of the Nelliampathy Planters' Association held at Cotengady Bungalow at 1.30. p.m. on May 9, 1926.

Present

Messrs. H. D. Chaldecott (*Chairman*), A. Hall, J. W. Stevenage, H. A. Boas and A. P. Kinloch (*Honorary Secretary*); and, by proxy, Messrs. H. M. Hall and A. W. White.

Proceedings (published in our issue of April 24—*Ed.*) of the Inaugural Meeting held at the Seetagundy Bungalow on April 15, 1926, were taken as read and confirmed.

1. Proposed by the Chairman and seconded by Mr. Hall that the Memoranda of Association of the Anaimalai Planters' Association be accepted with alterations as specified in the copy to be sent to the Association's Solicitors.

Carried

2. Proposed by Mr. Boas and seconded by Mr. Kinloch that the Honorary Secretary be instructed to apply to the Secretary of the U.P.A.S.I., for admission of the Nelliampathy Planters' Association to membership of the U.P.A.S.I.

Carried.

3. Proposed by Mr. Kinloch and seconded by Mr. Stevenage that Messrs. King and Partridge be requested to act as the Solicitors for the Nelliampathy Planters' Association.

Carried.

4. Proposed by the Chairman and seconded by Mr. Kinloch that the Honorary Secretary be instructed to write to the Excise Officer, Palghat, regarding the importation of unlicensed liquor to the Nelliampathy Hills.

Carried.

5. Proposed by Mr. Kinloch and seconded by Mr. Chaldecott that the Honorary Secretary be instructed to approach the Superintendent of Post Offices, Ootacamund, for the opening of a branch office to be called the Nelliampathy Post Office at Seetagundy Estate on the lines suggested by Mr. Hall and the above Superintendent of Post Offices. A poll being called the resolution was carried.

6. Proposed by Mr. Hall and seconded by Mr. Stevenage that the Honorary Secretary be asked to address the Dewan of Cochin in regard to the conversion of the present Wallanghy Ghat bridge path into a metalled cart road.

Carried.

7. Proposed from the Chair and seconded by Mr. Boas that the Honorary Secretary be instructed to approach the authorities concerned with a view to the metalling of the existing Kollengode-Nenmani-Seetagundy cart track with special regard to the fact that the Anglo-American Direct Tea Trading Co., Ltd., have paid an assessment of approximately Rs. 75,000 during the past 30 years or so and received no return.

Carried.

8. Proposed by Mr. Hall and seconded by Mr. Stevenage that a Committee be formed to enquire into the transport rates between Wallanghy, Kollengode and the various estates.

Carried.

9. Proposed by Mr. Hall and seconded by Mr. Chaldecott that the Honorary Secretary be instructed to write to the Dewan of Cochin State to ask that a special allotment be made for the pucca repair of the bridges on the Nelliampathy District Ghat roads that were destroyed during the floods of July 1924.

Carried.

10. Proposed by Mr. Hall and seconded by Mr. Stevenage that the Honorary Secretary be instructed to write to the Planting Member of the Cochin State Legislative Council suggesting that he should ask for the following official information at his earliest suitable opportunity :—

(1) The amount collected from all Nelliampathy District estates including Tithampara, in rents and from the sale of liquor and other licenses and tolls in the hills during the years 1923, 1924 and 1925.

(2) The amounts actually paid out for the district and ghat road maintenance works during the same years.

Carried.

11. Proposed by Mr. Hall and seconded by Mr. Kinloch that the Honorary Secretary be asked to write to the Dewan of Cochin in regard to the Rs. 5 rent being asked for cultivated lands in his notification No. 151, dated April 24, 1926 and to enquire whether this rent would be charged in the event of the good cart road not being constructed.

Carried.

12. Proposed by Mr. Kinloch and seconded by Mr. Boas that the Honorary Secretary be instructed to approach the Secretary, U.P.A.S.I., with a view to the Nelliampathy Hills being declared a Planting District under Rule XV of the Labour Rules.

Proposed from the Chair a hearty vote of thanks to Mr. Hall for the use of his bungalow.

A. P. KINLOCH,
Honorary Secretary.

H. D. CHALDECOTT,
Chairman.

B. MUNDAKAYAM PLANTERS' ASSOCIATION

Proceedings of the Twenty-first Annual General Meeting held at the Mundakayam Club on Saturday, May 8, at 2.30 p.m.

Present

Messrs. G. McPherson (*Chairman*), J. R. Vincent, C. L. McLean, H. V. Tringham, J. S. P. Symons, A. W. Leslie, G. A. Brooke, A. J. Mitchell, F. Hawkings, W. M. Gordon, A. D. Vincent, R. M. Saywell, O. J. Egan-Wyer and M. S. Calderwood (*Honorary Secretary*).

Visitor

Mr. J. F. Fraser.

The Honorary Secretary read the notice calling the meeting and the Report of the Auditor.

The Chairman said: 'Gentlemen, the Report of the Committee of Management and the Statement of Accounts having been in your hands for the past fortnight, you will agree to take them as read. Since addressing you last, the work of the Association has gone very smoothly and you will gather from a study of the Report that a large number of subjects were dealt with during the year. The Income Tax Test Case which was still *sub judice* at the time of the last Annual Meeting was carried to a successful issue in July, and we then congratulated ourselves on having heard the last of the proposal to tax the agricultural produce of Edavagal Lands. Our rejoicings were, however, short lived, as in November Government introduced an Amendment Bill to amend the Income Tax Regulations so as to countermand the decision of the High Court in our favour. The latest information with regard to this Bill is to the effect that Government have postponed its consideration though it was included in the Preliminary Agenda of the present session as stated in the Report. We are still hopeful that the Bill will either be withdrawn, or amended in such a way as to make it harmless. Rumours are current that the subject of an export duty on rubber is to be brought up in the Council. The Travancore Combined Association is in touch with Council affairs and will advise us of what takes place. I am glad to record that our proposal to the Combined Association to appoint a reader in Trivandrum is being given a trial.

In the last few months we have had two interesting visitors. Many of you must have read and enjoyed the report of Mr. Harris, of the Ceylon Scientific Department, on his visit to South India. We have also had the pleasure of meeting Mr. Fletcher of Messrs. Drake and Fletcher Ltd., and as a result of his visit we are hoping for many improvements in the spraying machines of the future.

I have pleasure in thanking the Committee of Management for their loyal support and assistance during the year. On leaving the district, Mr. Hamond resigned, and since then Mr. Saywell has taken his place. I have also to thank Mr. Calderwood for his efficient handling of the general affairs of the Association. The Honorary Secretary's work is often exacting, and Mr. Calderwood has not spared himself in the performance of his duties.

I wish you to accord to Mr. Hawkings a hearty vote of thanks for acting as the Association's Representative at this year's Sri Mulam Popular Assembly, work which involves considerable time and trouble (*applause*).

After replying to some questions the Chairman said, 'I now rise to move the adoption of the Report of the Committee of Management and the Statement of Accounts for the year ending March 31, 1926.'

Mr. J. R. Vincent seconded and the motion was carried unanimously.

SPECIAL BUSINESS

(1) *Budget, 1926-27.*—Copies of a draft Budget were tabled at the meeting and the Chairman spoke for some time explaining some increases and the reason for the budgetted deficit of Rs.598. He explained that the extra amount which it was anticipated might have to be spent on our propaganda work with regard to the Amendment Bill to the Income Tax Regulations now before the Council, could probably be saved out the allowance for the Association's Delegates; but as the Association

has some funds in hand to cover a deficit it was agreed not to bind ourselves down with regard to Delegates and no alteration was made in the Draft. Mr. J. R. Vincent then moved :—‘ That the Budget for 1926–27 as set out in statement dated May 8, be and is hereby approved and adopted.’

Seconded by Mr. R. M. Saywell.

Carried unanimously.

2. *Records.*—The Chairman explained that there was a large accumulation of old and apparently useless records of correspondence, etc., belonging to the Association and suggested that some part of it should be destroyed before handing over to a new Honorary Secretary. No resolution was deemed necessary and the retiring Honorary Secretary was instructed to destroy all records dated prior to the year 1921, excepting only the permanent books of the Association.

3. *Mundakayam Church.*—Mr. Leslie asked leave to introduce the subject of subscriptions to the Church and suggested that at least some part of the money sent to the Peermade Church should be devoted to our own local Church. The Chairman’s explanation that this money was raised for the Churchyard Fund and that we did not subscribe to the Church was accepted; and a member further pointed out that subscriptions, though collected by the Association’s Honorary Secretary, were personal. The Honorary Secretary explained that during that year the Committee of Management had undertaken to help the local church and that he was ‘*ex officio*’ Churchwarden. All collections from European services were taken over by the Association and administered by them in the interests of the Church buildings. Rs. 48 had been spent during the past six months, he stated, and there was a small credit balance. Mr. Leslie expressed himself as quite satisfied.

ORDINARY BUSINESS

Committee of Management.—The Chairman placed the united resignations of the Committee of Management in the hands of the meeting. On a proposal from the Chair Mr. C. L. McLean was unanimously elected Chairman and Mr. G. A. Rutherford, Honorary Secretary. The ballot for the other members of Committee resulted in the re-election of Messrs. J. R. Vincent and R. M. Saywell, and the election of Messrs. G. A. Brooke, A. W. Leslie and F. Hawkings.

Auditor.—Mr. F. Hawkings moved: ‘ That Mr. Vadivel Pillay be reappointed Auditor of the Association for the ensuing year at the same fee and allowance as previously.’

Seconded by Mr. R. N. Saywell and carried unanimously. Mr. Brooke then asked for a vote of thanks to the Chair seconded by Mr. Egan-Wyer. Mr. J. R. Vincent, in a few remarks expressing his thanks, paid tribute to the hard work done both by the retiring Chairman and Honorary Secretary. Mr. McPherson replied thanking the meeting and Mr. Vincent for his warm appreciation; and Mr. Calderwood after thanking Mr. Vincent, congratulated the new Chairman and Honorary Secretary and wished them a very successful term of office.

The meeting was then declared closed.

M. S. CALDERWOOD,
Honorary Secretary.

G. McPHERSON,
Chairman.

EXTRACTS FROM THE REPORT
OF THE
COMMITTEE OF MANAGEMENT
OF THE
MUNDAKAYAM PLANTERS' ASSOCIATION

For the year ending March 31, 1926

SOUTHERN INDIAN PLANTERS' BENEVOLENT FUND.—The Committee are glad to record a further increase of subscriptions to this Fund. Rs.425 was subscribed through the Association by Individuals and Members as against Rs.410 for 1924-25. Four Estates of the Malayalam Plantations, Ltd., subscribed, and in response to last year's appeal, the Manager of the Travancore Rubber Company, Limited, and the Manager of the Central Travancore Rubber Company, Limited, inform us that their Boards of Directors are informed of, and will consider the matter of a subscription in due course. The Mundakayam Valley Rubber Company, Limited, subscribed Rs.250 which was sent direct to the Secretary of the Fund and during the year Nenmeny and Redlynch Group and Yendayar Estate have both by donating Rs.1,000 become Patrons of the Fund. Altogether during this year the Fund has benefited from Members and Individual Members of this Association by the substantial sum of Rs. 2,692 and of the five Patrons of the Fund, three are members of Mundakayam Association.

SRI MULAM POPULAR ASSEMBLY—1925.—Subjects were Cattle Trespass and Registration of Bandies.

(a) *Cattle Trespass.*—In June, the Government wrote, sanctioning the opening of Cattle Pounds on Estates but stipulating

- (1) That Estates should build a Pound.
- (2) Guarantee it upkeep costs and any deficit and
- (3) Surrender site and buildings complete to Government.

Numbers (1) and (2) were only in pursuance of the undertaking given by Estates which desired to establish cattle pounds, but to number (3) serious exception was taken and we wrote at length to Government pointing out that Managers had no powers to surrender lands or buildings on their Estates. Government gave this point lengthy consideration and finally in a letter from the Chief Secretary, dated January 23, 1926, he stated that it would 'suffice if the applicant for the pound leaves, the building and site in the possession and control of the District Magistrate, so long as the pound is maintained.' We have accepted this condition, and the Government has not negatived our statement in the letter of reply, that a Manager would, of course, have the prerogative of requesting the District Magistrate's permission to close the pound if he finds it is unnecessary. The Honorary Secretary has prepared a *résumé* of the important correspondence relating to this matter right from the start, and we recommend all applicants to obtain this and ascertain quite definitely the conditions under which pounds are allowed to be established.

(b) *Registration of Bandies.*—Nothing further appears to have been done in this matter.

SRI MULAM POPULAR ASSEMBLY—1926.—The thanks of the

Association are due to Mr. Hawkings for attending this meeting as our Representative. The subjects were

- (1) Vellanadi-Cheruvally Road,
- (2) Rubber Stealing Prevention Regulation IX of 1087.

Mr. Hawkings' Report on this meeting has been circulated to members: the prospects of gaining the new road do not seem very hopeful; but favourable action by Government with regard to amending the enactments of the Rubber Stealing Prevention Regulation so as to make them more effective, is anticipated.

PRODUCE OF EDAVAGAI LANDS—INCOME TAX.—

(a) *Test Case.*—The High Court heard our case in July and judgment was found in our favour. The cost amounted to Rs.1,657 in all which was met by the Association's contribution of Rs.250 the Combined Travancore Planters' Association's contributions Rs.500 and the cess on Edavagai Acreage at 1½ and 3 as. per acre yielding Rs.907.

(b) *Proposed Income Tax Regulations Amendment Act.*—Despite the considered decision of the old Legislative Council that to tax Income derived by tenants from the agricultural produce of Edavagai lands was not advisable, and the decision of the court that under the Regulations as existing before the amendment Regulation V of 1100 this Income was not liable to tax (making three years' assessments refundable by Government) the new Council have thought fit to introduce a new Bill Amending Regulation V of 1100 so as to provide for this taxation. As soon as we heard that this new Amendment Bill had been suddenly introduced into the Council, its introduction opposed by only a small minority, we energetically took up the matter once again and the Association has been engaged since November in fighting this Bill. As the acceptance of its introduction appear in Travancore to amount to an acceptance of the principle of the Bill, it seems hardly likely that we shall succeed in doing more than to modify its ill effects so far as we are able. A Deputation consisting of the Chairman, Mr. J. R. Vincent and Mr. Krishna Aiyangar representing our Association, which was joined by Mr. John Mackie, Mr. J. B. Cook, M. L. C. and Mr. P. M. Mani who kindly agreed to add the weight of their influence to our representations, went to Trivandrum to meet the Dewan. A full report of the result of this deputation has been circulated to members and published, together with the memorial presented to the Dewan, in the *Planters' Chronicle*. Further propaganda has been undertaken and we now understand that the Amendment Bill will come up for a second reading at the Session of the Assembly commencing April 19, when our case will be fully represented.

LEGISLATION.—Travancore. Our Association's nominee Mr. J. B. Cook was returned unopposed for the Planting Member's seat in the Legislative Council.

VISIT OF HIS EXCELLENCY THE GOVERNOR OF MADRAS.—During October the Association enjoyed the privilege of a short visit from Their Excellencies Viscount and Viscountess Goschen during their tour of Travancore. Their Excellencies and party visited the Factory of the Travancore Rubber Company, Limited, and were entertained to Breakfast by the Association at Mundakayam Estate. All members had an opportunity of meeting Their Excellencies and the visit was a great success.

As will be seen from the accounts, the cost amounted to Rs.552 and in response to a request from the Committee of Management for a subscription of Re.1 per fifty acres a sum of Rs.240 was raised to help defray the Expenses.

ECONOMICS OF RUBBER

VIEWS OF EX-PRESIDENT OF THE R.G.A.

(Concluded from page 313, issue of May 8, 1926)

In May of 1922 the first report of this Committee was published, and, after a careful examination of all available figures, they advised that they were unable to contemplate without grave concern the position of the industry in British Colonies and Protectorates unless steps were at once taken to reduce stocks and further to prevent over-production of rubber so long as the potential productions continued to be substantially in excess of consumption, which, in their opinion, was likely to be the position for some years. They therefore recommended that steps should be taken to stimulate new and extended uses of rubber, but considered that this alone would not provide an immediate solution of the problem. They reported that voluntary restriction had already proved insufficient, and that the greatest hardship would fall upon the tens of thousands of labourers employed in the industry, as well as upon the large number of shareholders in this country and the many Asiatic and Colonial proprietors resident in the countries of production if the industry were allowed to drift along unprofitably until the financially weakest had been eliminated. They therefore advised that the output of estates during a specified previous period be taken as their 'standard production' and that a graduated scale of export duties be adopted, a low duty being fixed on the amount exported within a permissible percentage and prohibitive duties being fixed in case this percentage was exceeded, an automatic increase of 5 per cent. in the permissible export being provided for if the price remained at 1s. 3d. per lb. or over, or an increase of 10 per cent. if it remained at over 1s. 6d. They further advised that the Netherlands Indies Government should be approached with a view to their co-operating. This co-operation, however, was not forthcoming, and as matters went from bad to worse, a second report was presented and adopted in October of the same year, and the necessary legislation in Ceylon and the Federated Malay States was brought into force on the lines indicated, as from November 1, 1922, starting with exports allowed at the rate of 60 per cent of standard.

EFFECT OF RESTRICTION

The immediate result of this was a rise in the price of the commodity, which, however, fell away after the first few months of 1923 to 9½d. per lb. in the spring of 1924, thus bringing into play the emergency provision whereby there was an automatic decrease of 5 per cent if the price fell below 1s.—so that in Ceylon and the Federated Malay States they were in a position to export only 50 per cent. of their standard production. It will thus be seen that the manufacturer had to play his part in order to make sure of obtaining a sufficient supply of rubber for his future requirements by paying a reasonable price. The Americans, however, failed in this regard and apparently adopted a hand to mouth buying policy, although London stocks, which stood at about 60,000 tons at the beginning of 1924, were being visibly reduced to below 30,000 tons at the beginning of 1925, and the average price for the quarter ending January 31 in that year just failed to reach the 1s. 6d. necessary to secure a 10 per cent release, so that a 5 per cent release only took place. This resulted in manufacturers awakening to the danger of the situation and the course of prices began to trend upwards until in July they had reached 4s. 6d. per lb., and at the beginning of December attained a limit that had not been reached since 1921, viz., 4s. 8d. per lb. Coincidentally, London stocks fell below 4,000 tons. The high price

of 4s. 8d. undoubtedly for the time being involved considerable hardship, more particularly to the smaller manufacturers, although the larger interest were no doubt mostly well covered by reason of forward purchases, many producing companies having sold portions of their crops at the end of the previous year at the price of 1s. 6d. per lb.

Now it cannot be too clearly understood that such a depletion of London stocks eliminated the only safety valve, and the position was such as to open the door for outside speculators to take control entirely out of the hands of producers and manufacturers. It must be realized that both these parties are equally interested in stabilizing the price of rubber, and, if possible, confining fluctuations within reasonable limits. The United States are our best customers, consuming as they do some 70 per cent of the total world production, and we cannot be surprised, therefore, at the effect the recent 'boom' has had on the other side of the Atlantic. Much ill-informed comment appeared in the American Press, and particular attention has been drawn to the subject by the utterances of Mr. Hoover, whose main grievance appears to be that the rise in price has been entirely brought about by legislative action on the part of the British Government, and not by so-called 'natural' causes! These 'natural' causes, had they been allowed free play, would, as pointed out by the Stevenson Committee in their first report, undoubtedly have brought about an infinitely worse position than was actually the case, as extensive areas would have perforce gone out of cultivation, whereas the estates (although much of their labour had to be repatriated whilst only reduced quantities of rubber were called for, and it was found impossible to replace same in time to meet the suddenly increased demand) are now actually in a position to supply their full economic crops.

QUESTION OF SHORTAGE

Fears have been expressed that whatever may prove to be the case this year, there may be an actual shortage of supplies later on, but fortunately the high prices recently paid for spot rubber have acted as a great incentive to further plantings and extensions. It must, however, be remembered that plantation rubber is an industry dating back barely twenty years, and in its turn depends in the main upon another—the motor—industry, which has been in existence but little longer. Can we wonder, therefore, having regard to all the circumstances, that stability has not yet been attained, or that prices have fluctuated greatly! Rather I think we should congratulate ourselves that, thanks to British enterprise in the creation of vast areas of rubber, and to the rapid expansion of mechanical transport brought about in the main by American initiative (to say nothing of the numerous uses in countless directions to which rubber has been turned to the service of mankind by manufacturers on both sides) an immense advance in the march of civilization has been rendered possible.

In conclusion, I can only say that the sincerest good-will and the most earnest endeavours on the part of British producers will be exerted in the endeavour to meet the requirements of our customers, and I am confident that when more of our friends on the other side of the Atlantic have themselves embarked on the cultivation on a considerable scale, as now appears probable, they will realize more fully than at present its inherent difficulties and in particular the problem of adjusting the production of a crop that takes six years to come into bearing, so as to synchronize closely with the rapid expansion of mechanical transport throughout the world.

Malayan Tin and Rubber Journal.

EXPORTS OF FERTILIZERS AND OILSEEDS

FROM THE

MADRAS PRESIDENCY

(from a correspondent)

The figures for the first quarter of 1926 are shown in Table A, and call for no particular comment. Ceylon as usual is our chief customer for bones and cake, but the F. M. S. has discovered this Presidency as a source of groundnut oil cake.

The Rice account of the Presidency for the quarter is not without interest, and is given in Table B.

The Agricultural Department in Ceylon have recently issued a publication showing the extent of the import of fertilizers into that Colony since 1898 (Bull. No. 73), and the figures appearing in Table C are extracted from that publication.

These figures show in a most striking way not only the steady increase in the imports of fertilizing materials from British India, but also the steady rise of price as the demand for these materials has increased. Ceylon in 1898 imported only 12,768 tons of fertilizers all told, but in 1924 her total imports of all kinds of fertilizers was 82,240 tons. The average price per ton she paid in 1898 was Rs. 67 : in 1924 this had risen to Rs. 118.

The ryots of South India cannot compete with Ceylon in her demands for fertilizers and as the price advances it becomes more and more uneconomical for them to use these fertilizers for their low priced crops. They must perforce stand by and see their crops suffer while the manures they need so badly to improve their land and rise the yield of their crops pours out of the country to Ceylon and Europe. What makes it all the more pitiful is that the Agricultural Department is now in a position to offer them improved strains of seed which give them bigger inherent yields, but the better these strains are the more is the land depleted of plant food which the ryots are powerless to replace.

The source of the fertilizers for which figures are quoted is British India, the source of the fish manure and guano is the Madras Presidency entirely. The quantity of the latter which goes to Ceylon varies naturally with the seasonal catch of fish, but whatever the season the bulk of it find its way out of the Presidency instead of into the paddy fields.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

A. EXPORTS OF INDIGENOUS FERTILIZERS FROM THE MADRAS PRESIDENCY FROM JANUARY 1 TO MARCH 31, 1926

Country to which exported	BONES	OIL-CAKES				OIL SEEDS				HORNS
		Ground-nut	Gingelly	Castor	Others	Ground-nut	Gingelly	Castor	Others	
Tons	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	
Ceylon	1,830	91,396	90,386	10,394	284	692	59	...	1,538	...
France	91	...	...	...	...	1,504,686	...	4,000	...	100
Belgium	65	...	...	...	...	35,136	...	...	...	307
Germany	...	...	...	...	...	611,401	...	...	5,505	...
Italy	...	...	...	...	...	153,864	...	...	...	...
Netherlands	...	...	...	...	...	439,284	...	...	303	451
Spain	...	...	...	...	...	62,279	...	...	...	...
United Kingdom	...	...	...	...	...	71,303	...	...	...	2,507
America	...	...	...	...	...	...	...	49,924	...	...
S. S. & F. M. S.	...	4,527	...	...	...	...	...	...	22	...
Egypt	...	...	...	...	...	1,218,701*	...	...	4,049	...
Other Countries	...	...	...	...	...	14,547	...	...	...	10
Total	1,986	95,923	90,386	10,394	284	4,111,893	59	53,924	11,417	3,375

* Mainly to Port Said to await orders.

B. RICE—EXPORTS FROM AND IMPORTS TO THE MADRAS PRESIDENCY

FROM JANUARY 1 TO MARCH 31, 1926

Country	EXPORT				IMPORT			
	Rice		Paddy		Rice		Paddy	
	Cwts.	Value in Rs.	Cwts.	Value in Rs.	Cwts.	Value in Rs.	Cwts.	Value in Rs.
Ceylon	442,777	4,501,397	12,565	68,336	...	...	...	...
S.S. and F.M.S.	9,458	101,898	...	...	...	...	...	...
Burmah	421	5,390	..	...	...	...	...	...
Other Countries	199	2,070	...	...	201,003	1,375,818	10	90
Bengal	...	...	...	...	467	4,905	...	...
Bombay	...	...	...	...	3	24	...	...
Total	452,855	4,610,755	12,565	68,336	201,473	1,380,747	10	90

C. IMPORTS OF CERTAIN FERTILIZERS INTO CEYLON

FROM 1898 TO 1924

Year	Fish Manure		Fish Guano		Groundnut Poonac		Bone Meal	
	Tons	Price per ton in Rs.	Tons	Price per ton in Rs.	Tons	Price per ton in Rs.	Tons	Price per ton in Rs.
1898	73	57	10	120	...	...	4,714	55
1899	48	66	...	...	...	...	3,635	65
1900	25	51	31	168	...	...	4,802	51
1901	337	44	...	...	...	...	4,384	53
1902	899	51	...	...	...	...	3,723	48
1903	2,510	50	...	...	...	...	3,909	51
1904	3,134	58	10	...	...	...	4,377	57
1905	3,487	60	20	156	1,393	68	4,172	51
1906	6,001	58	20	144	1,387	72	10,286	36
1907	10,797	69	20	149	1,630	80	4,739	56
1908	9,713	57	50	123	3,515	80	6,573	67
1909-10	10,141	60	69	151	4,827	79	4,657	54
1910-11	19,845	59	160	139	5,752	84	5,544	65
1911-12	18,338	59	161	111	8,750	81	7,747	72
1912-13	20,726	57	3,661	111	10,507	78	6,644	83
1914	4,455	59	3,108	98	15,627	87	5,882	85
1915	3,082	73	52	102	14,989	99	9,766	77
1916	6,676	107	1,228	130	31,624	86	12,813	87
1917	7,645	66	1,287	160	28,828	94	5,392	106
1918	12,708	84	6,888	129	16,114	98	10,767	98
1919	13,363	102	10,963	113	24,488	96	12,535	88
1920	10,752	124	13,442	132	20,092	121	17,423	118
1921	3,618	102	1,576	146	19,670	110	5,052	118
1922	5,749	104	7,325	146	3,553	117	10,128	113
1923	9,292	86	12,578	145	15,025	129	14,673	107
1924	8,700	78	13,708	117	14,103	122	11,567	111

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending May 15, 1926
Bank Selling Demand Draft on London

10th	11th	12th	13th	14th	15th
17 15/16d.	17 31/32d.	17 31/32d.	17 29/32d.	17 29/32d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending April 24, 1926	January 1 to April 24, 1926	January 1 to April 24, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING APRIL 24, 1926)			N. India.	1 8.45	1 9.28	1 6.60
(a) Anamalais—			S. India	**1 9.26	††1 9.74	††1 6.39
Thayamudi ...	195	1 10 $\frac{3}{4}$	Ceylon...	1 10.77	1 10.50	1 8.17
Sholayar ...	198	1 10 $\frac{1}{2}$	Java ...	1 5.06	1 5.62	1 1.52
Periakaramalai ...	164	1 10	Sumatra.	Nil.	1 7.80	1 4.28
Nagamudi ...	192	1 9 $\frac{3}{4}$	Nyassa-land.	1 6.12	1 6.80	1 3.70
Thonimudi ...	261	1 9 $\frac{1}{2}$	Total ...	*1 8.66	†1 9.33	†1 6.45
(b) Central Travancore.			(B) COFFEE			
Caradigoody ...	142	1 8 $\frac{3}{4}$	SPECIAL CABLE, LONDON, MAY 19, 1926			
Thungumallay ...	103	1 8 $\frac{1}{2}$	'A' QUALITY 149 s. MARKET FIRM			
Nellikaye ...	75	1 8 $\frac{1}{2}$	London Prices (seven days ending April 27, 1926)			
Haileyburia ...	102	1 7 $\frac{3}{4}$	(a) Coorg—	bgs.	s. d.	Grades.
Mount ...	94	1 7 $\frac{1}{2}$	Margolly ...	139	130 11	1,2,3, PB&T.
Twyford and Ashley...	94	1 7 $\frac{1}{2}$	Cottabetta ...	108	127 11	1 and 2
(c) Kanan Devans—			Haleri ...	51	124 2	1,2,3, PB&T.
Yellapatti ...	94	1 11	Deverakadoo.	51	123 1	1,2, PB & T.
Kalaar ...	66	1 10 $\frac{3}{4}$	(b) Mysore—			
Munaar ...	112	1 10 $\frac{1}{4}$	Cannon C. M.	56	138 9	1,2,3, PB&T.
Guderae ...	126	1 9 $\frac{3}{4}$	Cannon C. B.	132	135 2	Do.
Sevenmallay ...	119	1 9 $\frac{1}{4}$	H. C. S. I. ...	51	131 10	Do.
(d) Mundakayam—			H. C. S. ...	80	131 4	Do.
Yendayar ...	102	1 7 $\frac{1}{2}$	(C) RUBBER			
(e) Wynaad—			The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, May 18, 1926, was 22 $\frac{1}{2}$ d.			
Erramaculla ...	50	1 8 $\frac{1}{2}$				

** Based on 3,097 packages.

†† " " 58,312 "

†† " " 54,283 "

* Based on 81,256 packages.

† " " 1,099,915 "

† " " 764,297 "

(b) *Précis of reports on the London Market received on Monday, May 17, and covering the seven days ending Tuesday, April 27 :—*

(1) *Tea.*—The weakness, which we reported last week as characterizing the sales which took place on Monday, April 19, was even more pronounced on Wednesday the 21st when a general decline in values took place. The average price fetched by South Indians during the week ending April 24, was as a consequence $\cdot 82d.$ lower than that which was realized during the preceding week.

(2) *Rubber.*—During the seven days under review the London stocks increased by 1,156 tons to 18,210 tons ; but, nevertheless, prices tended to rise ; probably as a result of the Colonial Office announcement that after August 1, the Exports permissible at the lowest rate of duty would be only 80 per cent of the Standard Production if the average price during the current May-July quarter falls below $1s. 9d.$ The ‘Spot’ quotation on Tuesday, the 27th ulto., was $23\frac{1}{2}d.$ The average price of rubber during the first quarter of the current year was $2s. 8\frac{3}{4}d.$ as against $1s. 6\frac{1}{2}d.$ for the first quarter of 1925.

(3) *Coffee.*—The market remained quite firm and as the previous page shows some of the best Mysore qualities fetched a quite satisfactory price.

III. Weekly Rainfall Statement

From Sunday, May 9, 1926, to Saturday, May 15, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	7·21	3·02	10·23	19. Coonoor ...	0·45	2·13	2·58
2. Kalthuritty.	3·97	5·59	9·56	20. Kotagiri ...	1·27	1·93	3·20
3. Tenmalai ...	2·78	6·16	8·94	21. Ootacamund	2·88	6·80	9·68 ¹
4. Mundakayam.	5·56	2·88	8·44	22. Yercaud ...	0·70	3·01	3·71
5. Peermade...	4·38	5·07	9·45	23. Devala ...	0·91	1·66	2·57
6. Twyford ...	5·58	5·23	10·81	24. Gudalur ...	1·11	1·69	2·80
7. V'periyar ...	1·91	2·83	4·74	25. CALICUT ...	3·42	1·39	4·81
8. Kalaar ...	2·03	5·71	7·74	26. Kuttiyadi ...	3·25	2·55	5·80
9. Chittuvurrai	2·81	3·51	6·32	27. Vayittiri ...	0·98	3·28	4·26
10. BODI'KANUR	0·43	1·89	2·32	28. Manantoddi.	0·46	2·96	3·42
11. COCHIN ...	7·82	1·70	9·52	29. Billigiris ...	1·24	3·93	5·17
12. Mooply Valley.	3·26	4·22	7·48	30. Sidapur ...	4·16	4·01	8·17
13. Pachaimalai	2·38	5·84	8·22	31. Pollibetta...	1·62	2·57	4·19
14. Mudis ...	3·83	4·33	8·16	32. Somwarpett	0·44	N.R.	N.R.
15. POLLACHIE.	0·25	2·62	2·87	33. Ballupete ...	1·09	0·37	1·46
16. Manjeri ...	5·97	0·25	6·22	34. MANGALORE.	0·04	0·71	0·75
17. Nilambur...	2·86	N.R.	N.R.	35. MADRAS ...	0·05	0·10	0·15
18. Naduvattam	N.R.	1·77	N.R.				

W = During the week.

P = Previously.

N.R. = No return.

(from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 22] SAT., MAY 29, 1926

[PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	349	Rubber Specialist's Circular	
Notices—		Tapping—Deep vs. Shallow.	353
U. P. A. S. I. Rule VI ...	351	Soil Infertility and Bacterial	
S. I. P. B. A. ...	351	Action ...	358
U. P. A. S. C. ...	352	Commercial and Meteorologi-	
G. S. O.'s April Report ...	352	cal ...	365

EDITORIAL NOTES

Sir Henry Wickham, the father of the Plantation Rubber Industry celebrates his Eighty second Birthday to-day. Sir Henry *Rubber's G.O.M.* commenced his career as a forest officer in British Honduras ; became greatly interested in rubber, started a plantation in Brazil, and at the end of 1875 was commissioned by the India Office to collect rubber seeds at £10 per 1,000 seeds. In March 1876 he chartered an Inman Line boat *The Amazonas* which had failed to find cargo for its return voyage to England, and proceeding up the Tapajos River managed to secure some 70,000 Hevea seeds on the high plateau lying between the Tapajos and Madeira Rivers to the west of the present towns of Pinhel and Boim. The seeds arrived at Kew on June 14, 1876 ; and of the 2,700 odd which germinated 1,919 were sent out to Heneratgoda, Ceylon, and subsequently from there distributed throughout the East. All who are interested in rubber will be delighted to hear that America is to-day presenting Sir Henry with a purse to signify her appreciation of his invaluable pioneer work ; and we are informed that Mr. Edgar B. Davis who first mooted the idea of a presentation headed the Subscription List with a donation of £1,000.

‘ The journalistic output in this land, to say nothing of the oratorical outpourings of our public men, is phenomenal in its volume ; and the fact that the mass of printed matter which thus results finds a ready sale bears testimony to the unquenched appetite which awaits such pabulum. We have in our midst many clever journalists and many eloquent speakers ; but there never perhaps has been an age in which, speaking generally, men have read so much and have thought so little. A pathetic faith in the infallibility of the printed word is a common characteristic of the rank and file of mankind all the world over. It is so much easier to accept than to *analyse*, to absorb than to *originate*, to adopt an idea than to *test* and *weigh* its value and its truth—in a word, to let others

undertake on one's behalf the laborious toil of thinking ; and for the journalist, too, it is at once more easy, more profitable and more pleasurable to tell people that which they want to hear, rather than that to which they should be compelled to listen. Thus it inevitably befalls that, in a country such as ours, thought concerning public affairs is apt to revolve in a vicious circle, popular prejudice dictating journalistic declamation, and finding its confirmation in the infallible authority of print.' To avoid possible misunderstanding we hasten to say that the above quotation is not a criticism of conditions in the Presidency of Madras, but an extract from a message which His Excellency Sir Hugh Clifford recently addressed to the Roman Catholic Community in Ceylon.

*Malaria and—
£. s. d.* Sir Ronald Ross, who has just issued a pamphlet from the Ross Institute on his recent visit to Ceylon, gives point to his insistence on the urgent necessity for an Anti-Malarial Campaign by reproducing a table prepared by one of the most capable rubber planters in Ceylon which shows that the actual loss in output due to shortage of labour caused by Malaria on a group of five estates amounted to nearly £1,000 for January alone ; and varied from nil on a hillside estate with a spleen rate of only 15 per cent, to Rs. 5,795 on an estate on the level with a spleen rate of 76 per cent. As it is not suggested that any of the five estates in question suffered from a particularly virulent outbreak of Malaria last January we assume that the figure is quoted as an indication of the average loss from this disease which accrues to estates situated within the Malarial Zone. There are also of course other expenses—such as hospital charges, medical attendance, and subsidies to the non-working members of the patients' families—in addition to the loss which results from the depletion of the productive labour force. Sir Ronald maintains that estates would be amply repaid for the expenditure involved in the appointment of a fully trained and qualified European Plantation—Malariologist ; who should be provided with a house and laboratory at a strategically central point, from which he could inaugurate a detailed survey of the incidence of malaria on estates, and organize the necessary comprehensive prophylactic campaign.

*U.P.A.S.I.
Membership* The Executive Committee, at a meeting at Ootacamund on the 20th instant, accepted the newly resuscitated Nelliampathy District Planters' Association and the Agricultural Service Bureau for Calcium Cyanamide as a Member and a Firm Member respectively of the U.P.A.S.I.

*Rubber Acreage
in Ceylon* The Rubber Controller for Ceylon states, in his Administration Report for 1925, that on December 31, the number of registered rubber estates of ten acres and over and of under ten acres respectively were 4,510 and 29,736 making a total of 34,246 against the 28,682 estates which were registered on December 31, 1924. The acreages of the 4,510 large estates and of the 29,736 small estates were respectively 418,908 and 48,522 making a total of 467,430. The total acreage of the 28,682 estates registered on December 31, 1924, was 461,025.

*The London
Pepper Market* At the end of last month the London stocks of Black and White Pepper were respectively 5,202 and 3,224 tons as against 2,390 and 2,417 tons for the corresponding date last year. As a natural consequence, therefore, the London Market is fairly quiet ; but despite this we understand that it is the general opinion that prospects for the coming autumn are quite good.

PROPOSED AMENDMENT OF THE U.P.A.S.I. RULES

NOTICE OF RESOLUTION

At the meeting of the Executive Committee held at Ootacamund on May 20, it was resolved that; in view of the non-observance in recent years of Rule VI of the U.P.A.S.I. and the undue laxity allowed by that Rule; the Committee would bring forward a resolution to alter Rule VI as follows :—

‘No subject other than those on the published Agenda shall be discussed except with consent of the meeting. No original proposition shall be made unless thirty days’ notice in the case of an Ordinary Meeting and fourteen days’ notice in the case of a General Committee Meeting stating objects and reasons has been given to the Secretary; except with the consent of the Executive Committee with which a copy of the proposed resolution has been lodged at least two days before the Meeting.’

By order of the Executive Committee.

H. WADDINGTON,

May 25, 1926.

Secretary.

SOUTHERN INDIA PLANTERS' BENEVOLENT FUND

List of Subscriptions Received

1925-1926

(Published under instructions from the Executive Committee)

District Association	No. of Planters	No. of Estates	Total amount		
			RS.	A.	P.
Anamalai P. A. ...	78	13	1,755	0	0
Central Travancore P. A. ...	28	1	415	0	0
Coorg P. A. ...	28	12	645	0	0
Kanen Devan P. A. ...	53	2	611	0	0
Mundakayam P. A. ...	17	8	2,750	0	0
Mysore P. A. ...	16	6	420	0	0
Nilgiris P. A. ...	6	1	645	0	0
Nilgiri-Wynaad P. A. ...	16	3	260	0	0
Shevaroy's ...	6	...	60	0	0
South Travancore P. A. ...	11	10	375	0	0
West Coast P. A. ...	18	3	375	0	0
Wynaad ...	10	8	300	0	0
Firm Members ...	16	...	1,450	0	0
Upasi Staff ...	6	...	60	0	0
Subscriptions for special purpose...	...	...	291	9	9
Total ...	309	67	10,412	9	9

U.P.A.S.I. SPORTS CLUB

NOTICE

RUGBY FOOTBALL

The following letter, dated May 14, 1926, has been received from Mr. Carrick, the Honorary Secretary, Rugby Football, Madras :—

'At a meeting held last night it was decided to hold the ALL INDIA RUGBY FOOTBALL TOURNAMENT commencing on Monday, October 4, 1926, and we sincerely trust that you will be able to send a side down. It promises to be an excellent tournament this year with Calcutta, Bombay and Ceylon competing. We have already received an entry from the Welsh Regiment, and understand there is a chance of the Navy sending a side up from Colombo. I might mention that the Rugby Union of Ceylon have very kindly invited Madras to send a side to tour Ceylon at the end of October, which has been gladly accepted.'

I have replied that the PLANTERS will be represented if nothing occurs to prevent it; and at the same time requested that the draw be done earlier this year in order to allow plenty of time for our men to know necessary date of arrival in Madras.

WOODBRIAR ESTATE,

May 18, 1926.

G. W. FULCHER,

Honorary Secretary.

MONTHLY REPORT

OF THE

GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.

FOR

APRIL 1926

During the month I was at Head-quarters from the 1st to 23rd, doing office work in connection with the closing down of the Peermade Tea Station, and the Rubber Experiment Stations at Mooply and Tenmalai.

Dr. Shaw, the Tea Scientific Officer, arrived at Coimbatore on the 21st of the month. On the 24th we proceeded to the Tea Experiment Station at Nellakotta, and returned to Coimbatore on the 26th. On the 27th we left Coimbatore to tour the tea districts starting with the Kanan Devans.

On the completion of this tour it is proposed to write a joint report.

Coffee Experiment Station, Sidapur.—Only 2.69 inches of rain fell during the month, distributed over 6 rainy days; as against a fall of 3.50 inches in April 1925, distributed over 12 days.

In the first week only 0.25 ins. were gauged. This was sufficient to bring forward about 30 per cent of the spike, of which roughly half was lost by shedding. After a heavy shower of 0.83 inches on the 24th, spike and blossom developed well. On the 30th however another fall of 83 cents rather spoilt prospects of a high percentage fertilization.

The coffee looks well on the whole. The sprayed plots came through the dry weather very well, and setting of the crop was good. 'Kents' has also set a fair amount of crop, but 'Jacksons' is not so good. 5 Kents, A and B type plants were again selfed this year and the setting of the crop has been satisfactory. Two of Hall's Hybrids were also netted. One which cropped well last year without selfing, has again cropped this year when selfed. The other was netted last year, but bore no crop. It was again netted this year; and, although spike was plentiful, blossom failed to open and the spike shed.

The usual round of work was carried out. The Farm Manager was suffering from malaria during the month.

COIMBATORE,

May 20, 1926.

D. G. MUNRO,

General Scientific Officer,
U.P.A.S.I.

CIRCULARS OF THE RUBBER SPECIALIST

No. 2 :—DEEP TAPPING *VERSUS* SHALLOW TAPPING

BY

HERBERT ASHPLANT, A. R. C. S, RUBBER
SPECIALIST, U. P. A. S. I.

A. INCIDENCE OF BROWN BAST

Although, owing to the diversity of systems of tapping practised and their varying frequency and depth, nothing that could be termed real evidence has been available, on the influence of the quality of the tapping upon Brown Bast ; one's general experience on estates has always suggested that deeply tapped trees are more liable to develop Brown Bast than trees that are lightly tapped. In order to settle the point an experiment was started in December, 1921, under the direction of the writer on the Mooply Experimental Station.

Two groups of fifty trees were selected, and the ordinary half sector divided by vertical channels into two equal regions (thus making two adjacent quarters). The back quarter of each of these trees was, during the course of the experiment, regularly tapped by means of a deep cut reaching to within about three-quarter to half millimetre from the cambium. On the front quarter, which was always tapped on the same days as its fellow, the tapping was kept shallow. The instructions were that on the shallow sector the tapping should not go deeper than to within two or three millimetres from the cambium. One group of fifty trees was tapped by deep and shallow cuts in this way daily. The other group of fifty trees was similarly tapped on alternate days only. In view of Keuchenius's work on metastasis in Brown Bast, the dividing channel between the deep and shallow sector was, on all trees, made right to the cambium in November 1922.

From the start of the experiment until March 31 last, when the Station was closed, tapping on the alternate day trees has continued on the same side, but as by the end of January 1925 the original sector on the trees in daily tapping had been exhausted, the cuts were changed over on this date to the opposite half. After the change over on the daily tapped trees, the dividing channel between the halves was also deepened to the cambium.

According to the Farm Manager, an examination of the trees in December 1921 showed no Brown Bast to be present. The writer, however, is not able to guarantee this, as the trees had previously been in tapping for a time, and were unlikely to be entirely free from the affection. Although there is no reason to assume in regard to whatever Brown Bast was present originally that it affected one sector more than another, it may be best, in view of the uncertainty, to take May 1923 as the starting point. The percentages of Brown Bast recorded for this date were obtained by the writer personally in a very careful tree to tree inspection.

Examinations made on three occasions showed the percentages of Brown Bast present to be as follows :—

	Daily Tapping		Alternate day Tapping	
	Deep Cut	Shallow Cut	Deep Cut	Shallow Cut
May 31, 1923 ...	18 %	18 %	14 %	8 %
January 31, 1925 ...	44 %	30 %	28 %	18 %
March 31, 1926 ...	52 %	36 %	32 %	20 %

COMPARATIVE YIELDS FROM DEEP AND SHALLOW TAPPED CUTS

Month	Daily Tapping		Alternate day Tapping	
	Deep Cut lbs.	Shallow Cut lbs.	Deep Cut lbs.	Shallow Cut lbs.
January 1922 ...	30.31	5.25	15.81	2.63
February „ ...	25.13	5.25	13.25	2.50
March „ ...	33.19	5.56	15.56	2.50
April „ ...	46.25	6.25	23.31	3.19
May „ ...	44.63	6.13	26.13	3.13
June „ ...	30.06	5.63	20.56	3.06
July „ ...	21.69	4.36	13.81	2.36
August „ ...	27.94	4.44	16.88	2.44
September „ ...	24.75	4.06	13.44	2.19
October „ ...	26.56	4.75	16.00	2.50
November „ ...	29.63	5.63	16.50	3.00
December „ ...	33.36	6.13	19.56	3.13
Total ...	373.50	63.44	210.81	32.63
January 1923 ...	19.31	4.94	12.63	2.69
February „ ...	17.40	5.58	7.90	2.74
March „ ...	30.36	10.44	12.90	4.68
April „ ...	35.16	7.74	17.28	3.92
May „ ...	32.96	5.96	18.00	3.24
June „ ...	22.12	5.30	13.50	3.00
July „ ...	15.26	5.16	8.56	2.54
August „ ...	17.72	3.78	9.48	2.20
September „ ...	24.10	5.50	14.70	2.82
October „ ...	32.30	6.64	16.58	3.28
November „ ...	29.16	6.14	16.20	3.10
December „ ...	33.58	7.96	17.94	4.08
Total ...	309.43	75.14	165.67	38.29
January 1924 ...	28.80	7.64	16.28	4.26
February „ ...	12.48	4.08	6.86	2.16
March „ ...	19.20	5.08	9.68	2.46
April „ ...	31.54	5.38	16.88	2.70
May „ ...	31.92	7.60	21.78	4.06
June „ ...	15.46	5.32	10.88	2.80
July „ ...	10.66	3.18	7.06	2.04
August „ ...	16.68	4.66	10.40	3.18
September „ ...	18.56	4.88	12.88	3.42
October „ ...	18.94	4.38	14.31	3.26
November „ ...	19.82	4.34	17.41	3.15
December „ ...	23.78	4.34	19.54	3.19
Total ...	247.84	60.88	163.96	36.68

COMPARATIVE YIELDS FROM DEEP AND SHALLOW TAPPED CUTS
—continued

Month	Daily Tapping		Alternate day Tapping	
	Deep Cut. lbs.	Shallow Cut lbs.	Deep Cut lbs.	Shallow Cut lbs.
January 1925	17.88	3.72	18.70	3.13
February „	18.86	5.52	14.83	4.33
March „	23.12	5.82	16.87	4.67
April „	23.08	4.60	18.02	3.70
May „	29.86	5.58	22.72	4.94
June „	23.42	5.64	16.65	3.70
July „	20.78	5.20	17.54	3.22
August „	25.10	6.50	18.65	4.35
September „	27.32	7.00	21.50	5.00
October „	29.00	7.00	21.52	5.43
November „	30.70	6.04	22.28	4.43
December „	31.70	6.90	23.15	5.11
Total	300.82	69.52	232.43	52.01
Grand Total for four years (from January 1922 to December 1925).	1231.59	268.98	772.87	159.61
January 1926	27.00	6.50	17.93	4.27
February „	18.00	4.50	11.96	2.72
March „	18.50	5.10	11.85	2.72
Total	63.50	16.10	41.74	9.79
Grand Total to end of March 1926.	1295.09	285.08	814.61	169.40
Comparative yield for 4½ years taking deep cut daily as 100	100	22.12	62.90	13.08

It may not be very remarkable where the experiment has been carried out over a long period such as this to find how closely the relative yields from the deeply tapped alternate day and deep daily cuts agree with the well-known 60 to 100 ratio established by many previous experiments for alternate day and daily tapplings. It is however, of some interest to note, since it shows an unexpected uniformity in the tapping, that the yields from the shallow tapped alternate day cuts also work out at about sixty per cent of those from the shallow tapped daily cuts. The actual proportion is 61 to 100.

The Brown Bast Results.—It is not proposed here to discuss at any length the Brown Bast results and their implications, but one or two

comments are called for. The final condition of the different sectors permit of no doubt as to the main question under investigation. Even allowing a large margin for the inevitable errors of experiment and personal judgment, there is no escaping the conclusion that deep tapping is considerably more provocative of Brown Bast than shallow tapping of the same frequency.

There are some truths that in the interests of one's peace of mind are better left at the bottom of the proverbial well, and the particular truth revealed above will, by many rubber growers, be placed in this class. In so far as any satisfaction is to be derived from the results, it may be got from the demonstration that the now generally favoured system of deep alternate day tapping is no more conducive to Brown Bast than a shallow tapped system of daily frequency. Though so mild as seemingly to constitute no strain worth speaking of on the tree, these daily shallow tapplings, which withdrew only from $\frac{3}{4}$ to 1 lb. of rubber per tree per annum provoked quite as much Brown Bast as the alternate day deeper tapplings that withdrew from 3 to 4 lbs. per tree. For comparative purposes, it may be useful to have the Brown Bast percentages and the annual yields in one table :

	Daily Tapping		Alternate day Tapping	
	Deep Cut	Shallow Cut	Deep Cut	Shallow Cut
Average Annual Yield per 100 trees ($\frac{1}{4}$ cuts.) ...	lbs. 616	134	386	80
Percentage of trees developing Brown Bast per annum ...	12 %	6.3 %	6.3 %	4.2 %

In calculating the annual percentage of Brown Bast the 1923 figures have been taken as the starting point.

According to these results, the tapping frequency would appear to be the most important factor in the causation of Brown Bast, though precisely in what way this upsets the mechanism of the tree, on any physiological theory, still remains as much of a mystery as ever. We have evidently to do with other factors than excessive latex withdrawals, for there is no proportionate relation between the percentage of Brown Bast and the amounts of latex removed. Frequent tapping, and deep tapping, have this in common, that with both, the interference with the normal processes of the tree is accentuated. More conductive tracts are severed and more essential nutritive substances removed in the cell sap. There are also the abnormal excitation, and the exposure of the delicate cortical tissues, to consider as possible factors.

With regard to organismal theories of Brown Bast, deep tapping, not so much because it lays bare additional latex tubes, but because it **exposes**

the more delicate internal cortex, obviously affords greater chances of infection than does shallow tapping. A perusal of the Stripe Canker results which follow, should leave no doubt on this point.

To any one who is inclined to look upon the greater percentage of Brown Bast associated with deep tapping as an argument in favour of lighter tapping, the relative yields of the two methods should be a sufficient deterrent. Only absolute immunity from Brown Bast would justify the mere contemplation of such uneconomical methods, and, as we have seen, even the shallowest alternate day tapping gave rise to 67 per cent of the amount of Brown Bast provoked by deep tapplings at the same interval. Had the shallow cuts been made slightly less shallow, it is probable that the Brown Bast proportion would have been higher. Owing to the peculiar disposition of the laticiferous system in Hevea, tapping, to be efficient, must be deep, and by this time most rubber planters recognize the necessity. The withdrawal of its latex from the Hevea tree is an unnatural operation which the tree apparently does not take kindly to. Be the tapping ever so mild and carefully done, we shall not escape a certain amount of Brown Bast. The lesson of this and other experiments is that Brown Bast is an inseparable concomitant of tapping in any form.


B. INCIDENCE OF STRIPE CANCKER ON DEEP AND SHALLOW TAPPED CUTS

Some data on this point derived from the experiment described above were reported during 1923. As this is the final report on the experiment, the Mooply Station now having been closed, it may be convenient to have all the results together in one paper:—

Percentage of Cuts progressively infected with Stripe Canker during the Monsoon

Months				Daily Tapping		Alternate day Tapping	
				Deep Cuts	Shallow Cuts	Deep Cuts	Shallow Cuts
Up to end of June	...	...	...	36 %	22 %	22 %	18 %
„ July	...	...	...	90 %	38 %	82 %	32 %
„ August	...	...	...	100 %	44 %	96 %	40 %
„ September	...	...	...	100 %	44 %	96 %	40 %

Since the object of the experiment was to get reliable information on the relative chances of infection afforded by deep and shallow tapping, the preventative disinfection of the Cuts was not attempted owing to fear of invalidating the comparisons.



INFERTILITY IN SOILS

IN RELATION TO BACTERIAL ACTION

BY

C. M. HUTCHINSON, C.I.E., B.A.,

Imperial Agricultural Bacteriologist.

Infertility as a negative term suggests the absence of elements required for fertility; it is necessary, however, to realize that infertility may result from the presence of substances or conditions inimical to the growth of plants.

The causes of infertility in soils may, therefore, be divided into two main groups or classes:—

(1) Those associated with the absence of substances or conditions necessary for fertility.

(2) Those depending for their action upon the presence of deleterious substances or conditions liable to interfere with the growth of plants.

To the layman an infertile soil suggests either a desert tract entirely bare of vegetation, or perhaps an area at one time under cultivation but now abandoned because of its infertility. The agriculturist, however, has a much higher standard of fertility in mind; to him an infertile soil is one which it does not pay to cultivate or at the best is of such poor quality or condition that nothing but necessity would make him spend his time and labour in doing so. To this latter class belongs a large proportion of the arable lands now under cultivation; these have come down from their original condition of high fertility as virgin soils to the present state of comparative infertility as a direct result of the artificial conditions of plant growth to which they have been subjected during years of crop cultivation. It is with this class of soils requiring highly expert treatment and knowledge that we are mainly concerned, those in which the degree of fertility is so low that relatively small causes, or infertility factors, may at any moment reduce their yield below the point at which it ceases to pay to cultivate them. It is therefore of prime importance for the agriculturist to be well acquainted with the various and numerous causes of infertility which may reduce the condition of his soil and the amount of his crop below the paying minimum.

One of the most common and well understood causes of infertility is the lack of a sufficient supply of those ingredients in the soil which are necessary for fertility. It is impracticable here to deal with these except to point out that an insufficiency of plant foods not only affects the growth of crops directly but also indirectly by limiting the activities of those bacteria upon which fertility depends. This is more especially the case with reference to the supply of humus, for reasons to be dealt with later.

Water supply of course is a vital factor and must be taken account of both from the point of view of deficiency and of excess; this implies management of the soil in such a way as to avoid both deficiency or excess of water, the latter with its concomitant result of lack of air being especially conducive to infertility by reason of its effect on bacterial activities in the soil.

On the other hand, infertility may result from the presence of harmful substances in the soil such as excess of organic acids or of alkali salts and in some cases of neutral salts including chlorides, sulphates and nitrates. With these causes of infertility we are not for the moment concerned, but others more generally distributed exist which are of great importance

although perhaps not fully recognized as such. Under certain conditions toxic bodies are produced in soils and their influence upon fertility depends largely upon the quantities in which they are present. Generally speaking, their production depends upon the existence of anaerobic conditions due to waterlogging and is the result of bacterial action of the class associated with this condition. In order to understand not only how such bacterial action takes place but to arrive at an adequate conception of its importance as a factor in soil infertility, it is necessary to know something about that class of soil organisms known as anaerobic bacteria. There is no definite dividing line between aerobes and anaerobes, that is between such bacteria as require oxygen and those that do not; there is an intermediate class the members of which can tolerate varying degrees of aeration or the reverse and even those species which are apparently obligate anaerobes can function in presence of small amounts of oxygen, especially in conjunction with certain aerobic species whose activities reduce the oxygen tension in the soil water. The fact that it is necessary to bear in mind is that soil conditions, so far as anaerobism or the reverse is concerned, determine whether anaerobic or aerobic bacteria shall predominate in such soils with results which will vary in accordance with the characteristic differences of their action.

Anaerobic bacteria and anaerobic fermentations are generally associated with unhealthy conditions of one kind or another; thus putrefaction as opposed to decay is produced mainly by anaerobes, which are also responsible for most septic conditions and incidentally for tetanus.

Anaerobic bacteria in soils produce infertility in several ways:—

(1) By the production of colloidal bodies resulting from decomposition of organic matter, plant residues roots and stubble, dead leaves, green manures, oilcakes and cattle manure. These colloidal bodies take the form of bacterial waxes or slimes which coat the surfaces of the soil particles and tend to block up the pores of the soil, thus interfering with aeration and drainage. It is of interest to note that the coating of the soil particles both organic and inorganic with bacterial wax has the effect of protecting them from further bacterial action, thus reducing the rate and amount of such important processes as nitrification of organic matter and solubilization of mineral phosphates. The fertilizing action of such partial sterilizing agents as toluene can be partly attributed to their solvent action upon this coating, exposing fresh surfaces to bacterial action; a similar result is produced by the mechanical rubbing and grinding action of cultivation processes such as ploughing and harrowing, and also by the aeration and desiccation resulting from the latter which tends to destroy the colloidal condition of the bacterial slimes. It is important to realize that anaerobism in soils tends to increase by reason of the fact that the anaerobic classes of bacteria, whose growth and preponderance results from the prevalence of this condition, are themselves capable of contributing to and increasing it by the production of colloids; thus the vicious circle is completed and this tendency becomes of great practical importance.

(2) By the production of toxic bodies which reduce fertility either (a) directly as plant poisons, or (b) indirectly by their interference with nitrification.

The first case involves exceptional conditions such as waterlogging or a soil of naturally high non-porosity such as a heavy clay.

Waterlogging in the presence of organic matter results in the production not only of colloids but of plant poisons by anaerobic bacteria. The presence and action of such poisons can be demonstrated by watering

plants with extracts of anaerobically incubated soils, apart from the well-known effects of attempting to grow plants in soils in which drainage has been interfered with or in which anaerobic fermentation of organic matter has been carried out to excess.

The maize plant affords an interesting case of natural provision against poisoning by organic toxins resulting from soil anaerobism; the secondary aerial root system commonly found in this plant is a provision against the absorption of toxins resulting from anaerobic conditions due to excess of moisture in the subsoil, which the plant is able to avoid by putting out secondary roots into the surface soil at that period of its growth when flooding of the soil is liable to occur.

Intoxication of the seedling maize plant is also liable to occur in wet soils as a consequence of bacterial invasion of the seed whilst the latter is still attached to and is providing nutriment to the young plant. This form of damage is probably due to mechanical injury to the seed-coat generally as a result of insect attack.

A special case of anaerobism is that produced by the growth of grasses, the closely interwoven roots and stoloniferous stems forming a sod or layer not only relatively impervious but giving rise to extra quantities of CO_2 in the surface soil by their decay. There is reason to believe that under certain conditions especially in wet seasons, toxins are formed as a result of the decay of parts of this growth; this result may be noticed where cut grass from the mower is allowed to lie during wet weather on the surface of turf, which is completely killed by this treatment and may not recover for months afterwards. In addition, the partially anaerobic conditions induced in the soil interfere with nitrification and consequently reduce fertility; this effect may be observed and measured and is probably responsible for the very marked and well-known inhibitory action of grass upon the growth of trees.

INDIRECT ACTION OF TOXINS ON FERTILITY

Nitrifying bacteria are known to be highly susceptible to the action of toxins of various kinds. Soil sterilized by heat is not only lacking in nitrifying organisms but when these are reintroduced by inoculation their normal action is inhibited by toxic bodies produced by the action of heat upon the organic matter present. Similarly anaerobic incubation of soil results in the production of toxins having an inhibitory effect upon nitrification, and in addition cases have been observed where anaerobic conditions in a soil have resulted in the multiplication of specific bacteria, capable of inhibiting nitrification by the toxic action upon the nitrifiers of the by-products of their metabolism. This action is most pronounced in presence of organic matter, which will fail to nitrify in a soil under reduced air supply, whereas the same soil under similar conditions of aeration will nitrify ammonium sulphate. That this inhibition of nitrification is due to the production of toxin from the organic matter is shown by the fact that nitrification does not immediately take place in a soil treated in this manner when complete aeration is provided subsequently, but only commences after a period of time (some ten to fourteen days) sufficient to allow of destruction by oxidation of the toxins thus formed.

In this case therefore we have an instance of infertility caused by interference with nitrification and resulting from the action of toxins not present in sufficient amount to produce directly harmful action on plants. The importance of recognizing this source of infertility lies in the frequency of the occurrence of the conditions giving rise to it. Any condition of the soil causing any degree of anaerobism will encourage the growth of those

classes of bacteria responsible for the effects described above ; such conditions may arise from improper soil management, such as ploughing when too wet, or from physical properties of the soil itself rendering it peculiarly liable to this source of infertility.

RELATION OF THE ABOVE FACTS TO AGRICULTURAL OPERATIONS

Agricultural operations consist mainly of:—

- (1) Cultivation, i.e., stirring the soil.
- (2) Irrigation or drainage, i.e., controlling the water supply and with it the air content.
- (3) Manuring—the addition of plant food in a suitable form.
- (4) Selection of suitable crops and of improved varieties to make the most of natural fertility or to minimize the effects of natural infertility.

Cultivation. The principal function of cultivation is to regulate the water supply of the soil and promote formation of available, i.e., soluble plant food, especially nitrates. Nitrification depends upon a suitable balance between air and water supply and upon removal or oxidation of certain byproducts of bacterial metabolism ; if this is not provided for, either nitrification does not proceed at a sufficient rate or the reverse action, i.e., reduction of nitrates by bacterial action occurs, the bacterial balance being then against the accumulation of nitrates sufficient for fertility. Therefore the operations of ploughing, harrowing, rolling and intercultivation must be carried out with a view to maintaining in the soil such conditions of water supply and aeration as will promote nitrification at that time of year when the growing crop is ready to absorb it. Hot weather cultivation has other functions besides that of killing out weeds ; this operation has a very decided action in lowering the percentage of anaerobic bacteria, destroying many of the deleterious byproducts of their growth, including some colloids, by oxidation and desiccation, and probably strongly discouraging certain infective and pathogenic organisms such as *Ps. tritici* and *Bact. solanacearum*. Ploughing wet has an extremely bad effect on many soils ; the result is infertility due mainly to destruction of the mechanical condition or tilth, this is brought about largely by the operation of a most important factor in soil physics, namely the film of air which coats and closely clings to the soil particles and is only displaced with difficulty ; this air film plays an important part not only in the biological activities of the soil, but in maintaining its physical condition, and exercises a vital influence in preventing water logging of the soil particles. Ploughing the soil when it is dry, by breaking up the particles increases the area of their surfaces and with it the content of the air held in the form of the air film upon these surfaces. Ploughing when wet, however, abrades the air film and rubs it off, replacing it with water, removing the permanent air supply and bringing the soil particles into close and adhesive contact. The puddling of clay such as is effected in a pug mill depends upon this action.

Apart from the deleterious influence of compaction upon the biological processes of soil, especially nitrification, it must be remembered that plant roots have to penetrate soil by sheer mechanical pressure and that many crops fail to do this in soils or subsoils whose texture is so close as to present mechanical resistance too great for easy penetration ; the 'pan' liable to occur in arable soils at the lower limit of cultivation is a familiar instance of this condition.

Drainage. The principal object of drainage is to prevent the formation or persistence of anaerobic conditions in the soil ; it is unnecessary to repeat the reasons for considering anaerobism fatal to fertility, but it may be pointed out that in a soil of average texture and fertility not only may be

whole existing supply of nitrates be destroyed in a few days, time by the existence during that period of anaerobism due to waterlogging, but conditions may be set up which will seriously interfere with the process of nitrification after removal of the excess of water.

Irrigation. Where irrigation is the standard method of water supply for the crops, knowledge of the infertility factors above described is of even greater importance than in unirrigated areas. Control of the water content of the soil not only places in the hands of the cultivator the power of supplying the water requirements of his crop, but makes it essential that he should possess all the information available as to the relation between soil moisture and the numerous and complicated biological processes making for fertility or the reverse, and dependent on appropriate or mistaken use of this control. There is great need for research and investigation into the water requirements of soils under irrigation; such enquiries could only be effectively carried out in irrigation areas and must give due weight to the biological factor. It is probable that the highly important problem of natural fixation of nitrogen in Indian soils is more likely to be solved by study of irrigated than of unirrigated soils and the results of the application of the solution will most probably be more readily attained in the former.

Manuring. The practice of manuring is a recognition of the depletion of soil fertility by the artificial cultivation of crops. It is of course impossible here to deal with this large subject in any way except to mention one or two points in connection with the relationship between the use of manures and the action of soil bacteria. We may consider as examples the supply of available nitrogen and phosphates as of practical interest and importance.

Nitrogen. Reference has already been made to the conditions, both favourable and the reverse, which occur in soil and which influence the conversion of unavailable organic nitrogenous food into nitrates. It has been pointed out that suitable conditions so far as air and water supply in the soil are concerned must be provided by appropriate cultivation; it is also necessary to know something about the capacity of particular soils to deal with the sources of nitrogen in question, i.e., whether the soil of an area under manurial treatment is capable of nitrifying the material available for this purpose. This introduces the interesting fact that instances have been found of soils in which not only does nitrification not occur, but examination has shown that nitrifying organisms are absent altogether. Although such soils are in most cases of a low grade of fertility and will carry only certain crops, in other instances such as some TEA soils, the crop flourishes and responds to ordinary manurial applications in such a way as to suggest that nitrate nitrogen is not necessary to its growth or well-being. This of course is also the case with rice under swamp conditions, to which crop nitrates are apparently not only unnecessary but actually harmful, except in the seedling and in the latest stages of growth. In certain soils from the neighbourhood of Ranchi containing no nitrifiers I have found it possible to induce nitrification by artificial inoculation with nitrifying bacteria, but this improvement would probably not be a permanent one unless intensive cultivation and applications of lime were maintained over considerable periods.

Another consideration arises in connection with the nitrification of organic manures, this being the suitability of the latter for the process.

Observation of the nitrification rate of various nitrogenous materials shows a wide variation in their suitability as evidenced by this rate; *mahua* cake for example only nitrifies in soil after prolonged periods of time, probably owing to its content of saponin. In practice, it is important not only to keep this in mind, but to be aware of the fact that nitrification is inhibited both by unsuitable soil conditions and by the application of excessive amounts of organic nitrogenous material. Other important factors come into operation in this connection and must be taken into account, but time forbids reference to them except to mention the possibility of loss of nitrogen as nitrate under conditions where the nitrification rate is so high as to lead to removal of nitrate by leaching by rain water passing through the soil. For this reason it is frequently advisable to apply dressing of cake in separate doses during the growing season of the crop, in place of all at one time.

Phosphates. The availability of phosphatic manures is intimately connected with bacterial action in the soils to which they are applied. Two distinct styles of bacterial activity are concerned: (1) those which tend to solubilize otherwise insoluble phosphates; (2) those whose action result in diversion of phosphate from the supply originally available for the plant.

(1) It is probable that a large proportion of the naturally available, because soluble, phosphate in the soil is in this condition as a result of acid reactions set up by bacterial activity, either by formation of organic acids or of carbon dioxide. It was originally considered that this action, generally associated with the decomposition of plant residues, such as green manures, oilcakes and cattle manure, resulted in the direct supply of soluble phosphates to the crop, and might be intensified by the method of composting mineral phosphates with organic matter. Experience, however, has yielded disappointing results with this method when utilized with the intention of obtaining supplies of soluble phosphates, and it has consequently been largely abandoned; this in my opinion is a mistake, as the apparent failure of the method is due to the appraisalment of the results in terms of directly soluble phosphate as is the practice with superphosphate, whereas so far as work at Pusa on this subject has gone it appears that changes in the condition of the original insoluble phosphate due to bacterial fermentation in the compost, take place leaving a certain proportion in a relatively available condition in the form of organic phosphorus compounds, probably constituents of the bacterial cells themselves. Evidence exists leading to the conclusion that the $P^2 O^5$ held in this combination can serve as plant food under soil conditions, either directly owing to the death of the bacterial cells or to later changes in the soil of an indeterminate nature. My present opinion based on field and laboratory experiments is, that bacterial action under suitable conditions is able to convert phosphate into organic combination and remove it from those influences which would otherwise tend to produce chemical reversion to the insoluble tricalcic condition; this organic combination will later present a source of phosphate food of relatively higher availability than the tricalcic form resulting from purely chemical reversion, or existing as such originally. The practical agricultural method of securing this result depends merely upon the provision of adequate soil moisture and sufficient organic matter to promote vigorous bacterial growth and activity; this is one of the principal functions of such operations as green-manuring.

A more specialized style of solubilization of phosphates occurs in the case of that effected by sulphur-oxidizing bacteria. Time does not permit

of anything more than reference to this process which I described in an article in the *Agricultural Journal of India* (January, 1924) and at the last meeting of the Board of Agriculture at Bangalore. It is of course an artificial method depending on the use of sulphur and bacterial cultures capable of producing sulphuric acid therefrom, but it is of interest to note that the method is now being tried on a commercial scale as a source of phosphatic manure.

(2) With reference to that class of bacterial action resulting in removal of phosphate from the root range of the growing crop it must always be remembered that bacteria are plants and as such will compete with the agriculturist's crop for plant food in the soil. We have seen that this happens in the case of nitrates and there is reason to believe that it is an equally important phenomenon as applied to the supply of phosphate; thus superphosphate when applied to a soil is partly taken up by the crop, partly reverted by chemical action, and partly absorbed by bacteria. As we have seen above, there is reason for supposing that this last portion remains relatively available as compared with that which has undergone chemical reversion, so that there is no reason for treating this form of bacterial activity as one likely to produce infertility in the soil.

On the other hand practical experience shows that in our Pusa soils the combination of green manures with superphosphate produces the best results, so that on the whole we may consider bacterial action in the soil as a favourable influence so far as supplies of available phosphate are concerned, and the aim of the agriculturist should therefore be to encourage such activity as much as possible. This can be done mainly by maintaining adequate supplies of organic matter, and the inclusion of the usual methods of doing so in agricultural practice forms another instance of a correct method based on empiricism derived from experience.

In conclusion, it may be emphasized that so far as soil fertility is concerned, this condition or its opposite can never be ascribed to one simple cause alone but is associated with the interaction of several. It is incorrect to say, for example, that lack of oxygen causes infertility only because plant roots require oxygen for healthy growth; we have seen that conditions in the soil producing an insufficiency of air tend to cause infertility through the combined operation of a number of factors, some positive such as the production of toxins and of colloids by anaerobic bacteria, and others negative such as the failure to form nitrates for want of sufficient oxygen to maintain the proper bacterial balance in the soil. The complete investigation of the reactions and especially the bacterial activities underlying and ultimately responsible for the complex changes and conditions in a soil, is essential and necessary for any understanding of the problem of soil fertility; in the country especially, owing to the high soil temperatures which prevail during a large part of the year, and the correspondingly rapid bacterial changes resulting therefrom, any advance towards solution of this problem must depend upon adequate recognition of the intimate connection between soil fertility and soil bacteriology.

The Agricultural Journal of India.

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending May 22, 1926

Bank Selling Demand Draft on London

17th	18th	19th	20th	21st	22nd
17 29/32d.	17 29/32d.	17 29/32d.	17 29/32d.	17 7/8d.	17 27/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending April 24, 1926	January 1 to April 24, 1926	January 1 to April 24, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING APRIL 24, 1926)			N. India.	1 8.45	1 9.28	1 6.60
(a) Anamalais—			S. India	**1 9.26	††1 9.74	††1 6.39
Thayamudi ...	195	1 10 $\frac{3}{4}$	Ceylon...	1 10.77	1 10.50	1 8.17
Sholayar ...	198	1 10 $\frac{1}{2}$	Java ...	1 5.06	1 5.62	1 1.52
Periakaramalai ...	164	1 10	Sumatra.	Nil.	1 7.80	1 4.28
Nagamudi ...	192	1 9 $\frac{3}{4}$	Nyassa-land.	1 6.12	1 6.80	1 3.70
Thonimudi ...	261	1 9 $\frac{1}{2}$	Total ...	*1 8.66	†1 9.33	†1 6.45
(b) Central Travancore.			(B) COFFEE			
Caradigoody ...	142	1 8 $\frac{3}{4}$	SPECIAL CABLE, LONDON, MAY 26, 1926			
Thungumallay ...	103	1 8 $\frac{1}{2}$	'A' QUALITY 149 s. MARKET FIRM			
Nellikaye ...	75	1 8 $\frac{1}{2}$	London Prices (seven days ending April 27, 1926)			
Haileyburia ...	102	1 7 $\frac{3}{4}$				
Mount ...	94	1 7 $\frac{1}{2}$				
Twyford and Ashley...	94	1 7 $\frac{1}{2}$				
(c) Kanan Devans—						
Yellapatti ...	94	1 11	(a) Coorg—	bgs.	s. d.	Grades.
Kalaar ...	66	1 10 $\frac{3}{4}$	Margolly ...	139	130 11	1,2,3, PB&T.
Munaar ...	112	1 10 $\frac{1}{4}$	Cottabetta ...	108	127 11	1 and 2
Gudrale ...	126	1 9 $\frac{3}{4}$	Haleri ...	51	124 2	1,2,3, PB&T.
Sevenmallay ...	119	1 9 $\frac{1}{4}$	Deverakadoo.	51	123 1	1,2, PB & T.
(d) Mundakayam—			(b) Mysore—			
Yendayar ...	102	1 7 $\frac{1}{2}$	Cannon C. M.	56	138 9	1,2,3, PB&T.
(e) Wynaad—			Cannon C. B.	132	135 2	Do.
Erramaculla ...	50	1 8 $\frac{1}{2}$	H. C. S. I. ...	51	131 10	Do.
			H. C. S. ...	80	131 4	Do.
			(C) RUBBER			
			The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, May 25, 1926, was 21 $\frac{1}{2}$ d.			

** Based on 3,097 packages.

†† " " 58,312 "

†† " " 54,283 "

* Based on 81,256 packages.

† " " 1,099,915 "

† " " 764,297 "

Précis of Reports on the London Market received on Monday, May 17, and covering the seven days ending Tuesday, April 27 :—

(1) *Tea*.—Owing to the Coal Strike no English Mail has reached us this week, and consequently we have only been able to reproduce on the previous page the selections which we gave last week from the tea prices obtained on the London Market during the week ending Saturday, April 24. *The Produce Markets Review* of May 1, however, informs us that 15,256 packages of Indian tea were on offer on Wednesday, April 28 and that, though the finer grades sold readily at a good price, common kinds were distinctly weak and in many cases withdrawn from the sale.

(2) *Rubber*.—Here again we have received no detailed report on the market for the week ending Tuesday, May 4, and can only say that the cabled 'spot' quotation for that day was 24½*d.* with the market quietly firm. It is estimated that the April shipments from Malaya will only be about 26,000 tons as against 35,000 tons in March, and this possibly indicates that the available reserve stocks on the estates have been more or less used up. Premiums on forward deliveries are becoming greater; and at the end of last month October-December, 1927, and 1928 deliveries were respectively quoted at ½*d.*, 1*d.* and 3*d.*, above 'spot'.

(3) *Coffee*.—As in the case of tea, we have reproduced on the previous page the figures which we published last week; since we have received no detailed report on the market for the week ending Tuesday, May 4.

III. Weekly Rainfall Statement

From Sunday, May 16, 1926, to Saturday, May 22, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	5·37	10·23	15·60	19. Coonoor ...	1·19	2·58	3·77
2. Kalthuritty.	5·16	9·56	14·72	20. Kotagiri ...	0·51	3·20	3·71
3. Tenmalai ...	4·94	8·94	13·88	21. Ootacamund	0·45	9·68	10·13
4. Mundakayam.	4·08	9·22	13·30	22. Yercaud ...	N.R.	3·71	N.R.
5. Peermade...	4·21	9·45	13·66	23. Devala ...	0·70	2·57	3·27
6. Twyford ...	3·43	10·81	14·24	24. Gudalur ...	...	2·80	2·80
7. V'periyar ...	1·65	4·74	6·39	25. CALICUT ...	1·84	4·81	6·65
8. Kalaar ...	1·49	7·74	9·23	26. Kuttiyadi ...	0·11	5·80	5·91
9. Chittuvurrai	1·63	6·32	7·95	27. Vayittiri ...	0·30	4·26	4·56
10 BODI'KANUR	0·90	2·32	3·22	28. Manantoddi.	0·06	3·42	3·48
11. COCHIN ...	1·30	9·52	10·82	29. Billigiris ...	0·53	5·17	5·70
12. Mooply Valley.	1·99	7·48	9·47	30. Sidapur ...	N.R.	8·17	N.R.
13. Pachaimalai	0·97	8·22	9·19	31. Pollibetta...	0·72	4·19	4·91
14. Mudis ...	1·49	8·16	9·65	32. Somwarpett	...	N.R.	N.R.
15. POLLACHIE.	1·65	2·87	4·52	33. Ballupete ...	N.R.	1·46	N.R.
16. Manjeri ...	0·56	6·22	6·78	34. MANGALORE.	0·46	0·75	1·21
17. Nilambur...	0·19	N.R.	N.R.	35. MADRAS ...	0·05	0·15	0·20
18. Naduvattam	...	3·22	3·22				

W = During the week.

P = Previously.

N.R. = No return.

(from April 4, 1926)

N.B — *Figures for the week ending May 22 have not been received from Sidapur or Ballupete; while the Somwarpett figures are still required for the weeks ending April 10 and 24. Will the Superintendents concerned kindly supply the missing figures in their next Rainfall Return Cards? Ed.)*

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 23] SAT., JUNE 5, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 367	D. Kanan Devans ...	375
District Association Meetings—		E. South Travancore ...	379
A. West Coast ...	369	Letter to the Editor—	
B. West Coast ...	369	A Planters' Tennis Assocn....	382
C. Wynaad ...	371	Commercial and Meteorologi- cal ...	383

EDITORIAL NOTES

It is with regret that we have to announce the death of Mr. Roderic Morison—sometime Proprietor of Mayfield Estate in the Nilgiri Wynaad—who died at Bangalore on May 25, 1926. When he was struck down many years ago by some form of paralysis which left him bedridden for life, his friends secured him admittance to the Home for the Aged at Bangalore ; where the Little Sisters of the Poor accommodate some 150 poor people who are incapacitated from earning their own livelihood, and who are, therefore, urgently in need of a shelter wherein they can pass the twilight of their life in comparative quietude and free from the gnawing fear that one day sooner or later, and probably sooner, they may find themselves without a place to lay their heads. The Southern India Planters' Benevolent Fund made an annual contribution (paid regularly since 1912) sufficient to keep him in a few simple luxuries like tobacco over and above the necessities provided by the Home. Occasionally also a friend with a few moments to spare in Bangalore visited him in order to regale him with the Planting 'shop' which—for his mental faculties were unimpaired to the end—he loved so well to hear. *Requiescat in pace.*

A valued correspondent suggests that we should ask our Readers to invite the attention of their Subordinate Staffs to the superlative merits of *The Planters' Chronicle* as an Advertising Medium for those in search of billets as Kanaku Pillays, Engine Drivers, Tea Makers, Writers, and Clerks. *The Chronicle* is of course THE Paper *par excellence* for all such ; since it is read by practically every South Indian Planter, and for the modest sum of Rs. 2-8-0 affords Advertisers on the page facing the Inside Back Cover a display which could only be procured for a very much heavier expenditure in the Daily Press. We have no doubt our Readers will bring our Correspondent's suggestion to the notice of their staffs ; for, in doing so, they will not only be giving a

sound 'tip' to deserving employees but also be bringing in a little more grist to the mill of the 'P.O.P.'

Mr. S. O. Boyd arrived in India from England at the beginning of this *The U.P.A.S.I. Staff* week, and has assumed duties as a Junior Superintendent of the Labour Department at Coimbatore.

Twin big Subscriptions by one Post to the Southern India Planters' Benevolent Fund are unfortunately as rare as—well, twins; *The S.I.P. Benevolent Fund* and triple ones it naturally follows are as rare as . . . ; or perhaps we will be more discrete in saying much rarer than twins. Yet they materialized on the Wednesday of this week, when the morning post contained three cheques of Rs. 250 each, sent by Messrs. Peirce, Leslie & Co., Ltd., as the 1926-27 Subscriptions of the Eddivanna, Kuttiadi and Kinalur Estates.

We have been asked to remind our Readers that Mr. G. S. Napier Ford *D. P. A. Office Bearers* has taken over the Honorary Secretaryship of the Central Travancore Planters' Association, and that therefore correspondence should in future be addressed to Vandiperiyar P.O. instead of to Peermade. We notice in this connection that the Minutes of recent District Association Annual General Meetings show that the Secretaryships of the Central Travancore; Mundakayam; Nelliampathy; Nilgiri-Wynaad and West Coast Associations have changed hands, and been respectively assumed by Messrs. G. S. N. Ford; G. A. Rutherford; A. P. Kinloch; F. Farmer; and J. T. Murray; to whose addresses, therefore, correspondence should now be sent.

It is proposed to publish a new edition of this indispensable Planters' Reference Book early in September next; and the *The Planting Directory of Southern India* Secretary of the U. P. A. S. I. would be much obliged if all Readers would now inform him how many copies, at Rs. 7-8-0 each Post free, they will require; so that he may be in a position to estimate approximately the number of books it will be necessary to print.

We understand from *The Tea and Coffee Trade Journal* that Mr. G. C. Denham, C.I.E., C.B.E., O.B.E., late Inspector-General of *A Police Officer's Retirement* Police in Singapore and formerly of the Indian (Bengal) Police, is about to succeed, if he has not already succeeded, Mr. E. J. Hammond as Representative of the Anglo-Dutch Plantations Co., Ltd., which controls in Java and Sumatra an area of over half a million acres or approximately 800 sq. miles. Their magnificent properties were first exploited in the first half of the nineteenth century by Peter Hofland an enterprising pioneer Dutchman born near Madras who bought them from various private individuals to whom they had been assigned by General Raffles during the temporary occupation of Java by the British in the Napoleonic Wars. He planted vast areas with *Coffea Liberica* (*Coffea Arabica* having been found unduly susceptible to the onslaught of *Hemileia Vastatrix*); but his two sons who inherited the property after his death allowed it to fall into grievous disorder, and eventually mortgaged it to a bank from which it passed into the hands of the agricultural company that sold it (after some twenty-three years' very indifferent management) for 8,500,000 guilders to the Anglo-Dutch Plantations Co., Ltd., in 1909. The principal crops are Tea, Rubber, Coffee, Cinchona and Tapioca; and the Tea and Coffee crops were respectively 9,000,000 lbs. and 20,400 cwts. in 1924. The labour is housed in neatly laid out model villages; in which pipe water is available everywhere, and the streets and houses are electrically lit.

DISTRICT ASSOCIATION MEETINGS

A. WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of an Extraordinary General Meeting of the West-Coast Planters' Association held at Cochin Club on Saturday, May 22, 1926, at 11 a.m.

Present

- | | | |
|--|---------|----------------------------|
| 1. Mooply Valley Rubber Co. | ... per | Mr. H. J. Walmesley, |
| | | <i>Chairman.</i> |
| 2. Messrs. Harrisons & Crosfield, Ltd. | „ | Mr. R. Ainsworth. |
| 3. Pullengode Rubber Co., Ltd. | ... „ | Mr. S. C. Forsdike. |
| 4. Messrs. Pierce, Leslie & Co., Ltd. | „ | Mr. I. J. Hughes. |
| 5. Kerala Calicut Estates, Ltd. | ... „ | Mr. C. E. M. Browne, |
| | | <i>Honorary Secretary.</i> |
| 6. | | Mr. J. T. Murray. |

The notice convening the Meeting was read.

The following resolution was proposed from the Chair :—

‘ That the Articles of Association of the West Coast Planters’ Association be altered in the following manner.’

‘ That in the Second Para of the Article No. 7 the words “ Rs. Five ” shall be substituted for the words “ Rs. Twelve.” ’

Carried unanimously.

C. E. M. BROWNE,
Honorary Secretary.

H. J. WALMESLEY,
Chairman.

B. WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the 14th Annual General Meeting of the West Coast Planters' Association, held at the Cochin Club on Saturday, May 22, 1926

Present

The Mooply Valley Rubber Co., Ltd. ... per Mr. H. J. Walmesley,
Chairman.

Messrs. Harrisons & Crosfield, Ltd.	... „	Mr. R. Ainsworth.
The Pullengode Rubber Co., Ltd.	... „	Mr. S. C. Forsdike.
Messrs. Pierce, Leslie & Co., Ltd.	... „	Mr. I. J. Hughes.
The Kerala Calicut Estates, Ltd.	... „	Mr. C. E. M. Browne,
		<i>Honorary Secretary.</i>

1. The Notice convening the Meeting was taken as read.
2. The minutes of the last Regular Meeting were read.
3. The Chairman in addressing the meeting said he did not propose to take up the time of the Delegates with a speech, but that there were one or two subjects to which he thought it necessary to refer.

The first was the poor result of the call for subscriptions to the Planters' Benevolent Fund which amounted to Rs. 375 against Rs. 220 last year. He pointed out that an unduly large number of members contented themselves with the minimum subscription of Rs. 10 a year, and that the subscription from the Companies in the P. A. amounted to only Rs. 75 a year, several companies owning in some cases several thousand acres, not subscribing at all. He had noticed during a recent tour in another district that estates owning only 100 or 200 acres were regularly subscribing Rs. 25

a year or over. He also pointed out that life members need not necessarily consider that they had done all they could be expected to do by once paying the life membership subscription.

The other matter to which he wished to refer was the poor attendance at meetings particularly those held in Cochin about which he would propose a resolution later on.

4. The Honorary Secretary read the following report :—

Honorary Secretary's Report for 1925-1926

Meetings.—Four Meetings were held during the year.

Acreage.—The acreage subscribing to the Association was 16,640 ; and there were 14 personal members. A further 120 acres, 20 Rubber and 100 Tea, have announced their intention of subscribing.

S. I. P. B. Fund.—Rs. 375 were subscribed from this Association against Rs. 220 last year.

U. P. A. S. I. Sports Club.—Thirteen members of the Association subscribed to the Sports Club, and Rs. 50 was subscribed by this Association.

Expenditure account.—The item of Rs. 288 shown as private membership subscription was actually arrears, due from eight members since 1925, which had not been credited in the books previously and was collected during the year. The income of the Association including the above sum of Rs. 288 and Bank interest Rs. 5-5-9 amounted to Rs. 1,441-5-9 ; and the expenditure Rs. 1,050-9-9 : leaving a balance of Rs. 390-12-0 to be transferred to Capital Account.

Audit.—The Accounts were audited by Mr. Venkatadri Ayyar, as the Registrar of Joint Stock Companies insisted on an audit being made by a Certified Government Auditor. His fee will be included in the next year's accounts.

I now beg to place my resignation in your hands.

5. *A Vote of Thanks* was accorded to the Honorary Secretary.

6. *Rubber Growers' Association and Scientific Department.*—The U.P.A. S.I. Circular, regarding the expenditure on Mycological Station and Experimental Stations was read ; and the Secretary was instructed to write to the Secretary, U.P.A.S.I., and draw his attention to certain discrepancies in the figures given in the circular.

7. *Roads and Communications.*—Mr. Forsdike drew the attention of the meeting to the condition of the roads between the Pullengode Estate and Manjeri, and particularly to certain bridges which are in a dangerous state. The Honorary Secretary was instructed to take the matter up with the Malabar District Board.

Correspondence regarding the proposed alteration of the Railway timetable between Cochin and Calicut was read, and the Honorary Secretary was instructed to write to the Chief Transportation Officer of the S. I. R., and express the appreciation of the Association at the proposed alteration in the timings of the train referred to, and to request that the alteration might be expedited.

8. *Import Duty on Sprayers Spare Parts and Copper Sulphate.*—The Chairman drew the attention of the meeting to the fact that while sprayers were exempted from Import Duty, as agricultural implements ; the same did not apply to spare parts and accessories. Mr. Browne mentioned that there appeared to be different interpretations of the Schedule, as he had been made to pay duty at the full rate on sprayers imported in one port, while others imported at another port were allowed to be imported free.

The Secretary was instructed to ask the Secretary, U.P.A.S.I., to take the matter up with the Director of Customs, Madras; and to ascertain whether a reduction of duty could not be obtained on Copper Sulphate, imported for spraying purposes only.

9. *Roll of Honour*.—Letter from the Secretary, U.P.A.S.I., *re* suggestions of the Executive Committee was read, and the meeting expressed their approval of the principles laid down by the Executive Committee:

10. *Correspondence* was laid on the table and discussed.

11. *Election of Office Bearers*.—The Following were elected.

Mr. C. E. M. Browne: *Chairman*.

Mr. J. T. Murray: *Honorary Secretary*.

Messrs. H. J. Walmesley.

H. R. Carson Parker. } *Committee*.

P. N. Ashby.

Messrs. H. J. Walmesley.

H. R. Carson Parker. } *Upasi General Committee*.

12. *Meetings*. The following resolution proposed from the Chair was carried unanimously:—

‘That in view of the poor attendance at Meetings of the W.C.P.A. held in Cochin; in future meetings be held alternately in Calicut and the Mooply District, instead of at Cochin and Calicut as heretofore.’

13. The meeting terminated with a vote of thanks to the Chair, and the Cochin Club for the use of the room.

C. E. M. BROWNE,
Honorary Secretary.

H. J. WALMESLEY,
Chairman.

C. WYNAAD PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Annual General Meeting held at Meppadi Club
at 2 p.m. on Wednesday, May 19, 1926.

Present

Mr. B. M. Behr (*Chairman*), Messrs. T. C. Anderson, A. R. H. Angus, G. Q. Archard, D. Bate, J. E. Bisset, B. St. J. Boulton, W. G. Craig, H. C. Davies, C. E. A. Ewart, E. E. Eyre, T. P. Gauld, H. J. C. Hammond, R. W. M. Hay, E. Janzen, A. L. Lang, R. A. Leslie, E. R. Peachy, S. H. Powell, K. W. Rowe, J. Strachan and I. W. Finlayson (*Honorary Secretary*).

The notice calling the meeting was read.

The proceedings of the last meeting were taken as read and confirmed.

1. The Honorary Secretary read his annual report as follows:—

‘GENTLEMEN,

(1) *Meetings*.—During the year we have held 10 General Meetings, which have all been well attended.

(2) *Membership*.—The acreage which Agents and Proprietors have notified me will subscribe to the Association during the 1926/27 is as follows:—

Tea	9,671
Coffee	206
Pepper	80
Rubber	61

The total being ... 10,018 acres, comprised of 24 different estates.

During the year Kuppamudi Estate resigned membership of, and Narrikallu Estate joined, the association. The total number of individual members is 43 including 2 personal members.

(3) *Season and Crops.*—(a) *Tea.* On the whole the season has been an excellent one for tea; the monsoon being normal and much less disastrous than that of 1924. Crop for the year from all estates amounted to 5,131,537 lbs. or a yield per acre of 556 lbs. taken on the acreages in bearing on the different estates including a lot of immature tea under 7 years. Prices are very gratifying; the South India average at the end of the year being 1/9.39 against 1/6.45 at its commencement, and it looks as if this period of prosperity is likely to continue for some little time.

(b) *Coffee.* The coffee crop for the year has been below average. Prices have been fairly satisfactory.

(c) *Pepper.* This crop as far as Wynaad is concerned has been a poor one; but owing to failure of the crop in the Straits and elsewhere, the prices have risen considerably in the past few months.

(4) *Labour.*—The supply of labour was sufficient for the requirements of most of us, but there was as usual a shortage during the hot weather months.

The Control of the Labour Department was reorganized, and the new system of Control Committees commenced on April 1, 1925. Though a year is rather a short time in which to give an opinion, I think there is little doubt that the system is proving to be an unqualified success. Prospects for next season appear to be good.

(5) *Grain.*—The prices of grain have fluctuated throughout the year, but not more so than usual.

(6) *Health.*—During the year there were two outbreaks of plague in the district; the first being Pneumonic plague which broke out during October and November in Meppadi and Poythana and resulted in some 6 deaths. The second attack was Bubonic plague also in Meppadi, and was brought in apparently by grain from Calicut or Mysore probably from both.

This attack was more serious in that it spread to the neighbouring estates. Prompt action was taken however in both outbreaks and supplies of vaccine were brought up by the Health Officer who inoculated the coolies on all the surrounding estates; and this, together with the closing of the weekly shandy, disinfection and exposure of provisions, etc., to the sun, prevented the outbreaks from assuming the very serious proportions they might otherwise have done. As far as can be ascertained over 15 deaths occurred from this plague.

Our thanks are due to Mr. Pate, the Collector of Malabar, for his prompt response to our appeal for his help; to the Health Officer for carrying out the inoculations; and to Dr. T. K. Govindan Nair who discovered both outbreaks almost at their commencement and did all in his power to stop them.

(7) *Roads.*—During the monsoon most of the roads were in poor condition, particularly from Chundale to Sholadi Bridge but a lot of work was put in after the monsoon. Owing however to Nadughani Ghaut still being closed, the traffic on our roads is still far above normal and consequently the surface is again deteriorating rapidly. We continue to support the Nilgiri-Wynaad Planters' Association in pressing for the early re-opening of this outlet on which I understand work is now proceeding.

(8) I take this opportunity of thanking all those who have helped me to carry out my duties as Honorary Secretary, and am particularly grateful to our Chairman and to Mr. Gwynne.

(9) *Accounts*.—The accounts for the year duly audited have been placed before you, and I now ask you to adopt them if they meet with your approval; and accept my resignation.'

2. The Chairman in moving the adoption of the accounts and Auditor's report made a short speech recording with regret the deaths of two old members of the Association, Mr. W. R. M. McKenzie, and Dr. F. Milton.

He drew attention to the increased interest in, and amount of work done on, the Wynaad Roads by the Malabar District Board Engineer.

He commented on the political aspect of the labour problem; the present position of the Scientific Department; and the welcome increase in membership of, and interest taken in, The Sports Club.

In placing his resignation before the Meeting, he thanked the members for the support given him during his term of office; and made special mention of the promptness and efficiency shown by the Honorary Secretary, Mr. Finlayson.

The proposition 'that the Accounts and Auditor's report for the year be adopted' was then put to the Meeting and carried unanimously.

3. *Budget*.—The Budget for 1926/27 was then considered.

Mr. H. J. C. Hammond proposed and Mr. S. H. Powell seconded the following resolution:—

'That the Honorary Secretary be instructed to convey the thanks of this Association to Dr. T. K. Govindan Nair for the prompt and effective manner in which he dealt with the recent outbreak of plague in Meppadi; and that a cheque for Rs. 250 be forwarded to him as a mark of appreciation of his services to the District.'

Carried unanimously.

The rate of subscription for 1926/27 was fixed at 3 annas per acre. The Honorary Secretary pointed out that the present salary to the Clerk was inadequate and requested permission to purchase a Cyclostyle for the use of the Association as correspondence was greatly increased.

It was resolved that the Clerk's salary be increased to Rs. 15 per month, and sanction be given the Honorary Secretary to purchase a Cyclostyle for the use of the Association. The Budget was then passed.

4. *Scientific Department—Rubber*.—The Chairman pointed out that, in view of the proceedings of the South Indian Branch R.G.A. published in the *Planters' Chronicle* of April 17, 1925, this question would not now affect the Wynaad Planters' Association.

5. *Terms of Employment of European Employees of the Labour Department*.—The revised draft rules proposed by the Director of the Labour Department were then discussed, and the following resolutions were passed.

(i) *Pay and Allowances*. Proposed by Mr. H. J. C. Hammond and seconded by Mr. W. G. Craig, 'That the scale of pay for Junior Superintendents suggested by the Director, Labour Department, be approved.'

Carried.

Proposed by Mr. H. C. Davies and seconded by Mr. R. A. Leslie, 'That the scale of pay for Senior Superintendents suggested by the Director be also approved.'

Carried.

(ii) *Leave and Furlough.*—

Proposed from the Chair, 'That (a) Casual leave be limited to three weeks in each year but that casual leave should not be added to home furlough.'

(b) 'First furlough be granted after 4½ years' service and subsequent furloughs four years after return from the previous furlough.'

(c) 'Wives of married employees to receive one free passage (single or return according as to whether further agreement is signed before departure or not) each time the employee is granted leave. No necessity to limit the wives' free passages to once in 5 years.'

Carried.

6. *Village Panchayats.*—After some discussion, a Sub-committee consisting of Messrs. Bisset, Powell, and one representative of the Panora Tea and Produce Co., Ltd., was appointed to consider the question of constituting a Village Panchayat in Meppadi.

7. *Cash Supply Bills.*—This matter has now been taken up by the Companies concerned.

8. *Labour.*—(a) *Election of Control Committee Members.*—

Proposed by Mr. E. E. Eyre, 'That Messrs. B. M. Behr and T. P. Gauld carry on as members of the Control Committees for Mangalore and Coimbatore respectively.'

Seconded by Mr. H. C. Davies.

Carried.

Proposed from the Chair, 'That Messrs. E. E. Eyre and W. G. Craig be appointed the respective members in waiting.'

Carried.

Proposed from the Chair, 'That Mr. J. E. Bisset be appointed member of the Mysore Control Committee and that Mr. H. C. Davies be member in waiting.'

Carried.

(b) *W. P. A. Labour Committee.*—The District Labour Rules drawn up by the Committee were discussed and unanimously adopted.

The Honorary Secretary was instructed to write to the Nilgiri-Wynaad Planters' Association enclosing a copy of the rules, and ask if they would be prepared to co-operate in their enforcement.

The following were elected members of the Labour Committee for the year 1926-1927 :—Messrs. Behr, Davies, Gauld, Craig and Eyre.

(c) *District Labour Officer.*—The circular letter from the District Labour Officer to individual members was discussed and it was agreed that the Chairman reply to it on behalf of the Association.

9. *District Board Representative.*—The Chairman stated that no reply had been received to his letter to the President, District Board; and the subject was therefore postponed.

10. *Other Competent Business.*—

Wynaad Resettlement Survey.—The Honorary Secretary was instructed to forward copies of the correspondence received from the Honorary Secretary, Nilgiri-Wynaad Planters' Association, to Agents and Proprietors.

11. *Election of Office Bearers, for 1926-1927.*—A ballot was taken and it was found that Mr. B. M. Behr had been re-elected Chairman and Mr. I. W. Finlayson, Honorary Secretary.

12. *Election of Auditors.*—Proposed from the Chair 'That Messrs. N. C. Rajagopal and Co. be elected as Auditors and that the fee be Rs. 25 per Annum.'

Carried.

13. *Election of Members of U.P.A.S.I. General Committee.*—Proposed by Mr. T. P. Gauld and seconded by Mr. E. E. Eyre, 'That the Chairman and Honorary Secretary be elected.'

Carried.

The Meetings then terminated with a vote of thanks to the Chair.

J. W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

D. KANAN DEVAN PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of the Annual General Meeting of the above Association held at
High Range Club, Munnar, on Saturday, May 1, 1926, at 3 p.m.

Present

A. J. Wright, Esq. (*Chairman*), Messrs. H. L. Pinches, J. S. B. Wallace, F. Cottrell, A. G. MacGregor, J. S. Hawkins, P. G. Campbell, J. M. Bridgman, W. J. Dixon, H. Kirby, G. D. Marr, M. C. Koechlin, A. H. Dixon, J. Gray, C. K. Olney, E. H. Francis, E. C. McCankie, Wm. Mackenzie, W. O. Milne, W. P. Laird, J. W. Tolson, H. J. Watson (*Honorary Secretary*); and, by Proxy, Alymer Ff. Martin and W. I. Hatherell.

Visitors

D. G. Munro, Esq., General Scientific Officer; Dr. W. S. Shaw, Tea Specialist; T. H. H. Cameron, Esq., Commissioner, Devicolum; and Messrs. B. H. Mathews, H. O. Thomas, G. S. Gillies, R. Brown, A. Fryer and J. Paterson.

The notice calling the Meeting was duly read. The Agenda were added to with permission of the Meeting, and the following statement of Agenda, as amended, was laid on the Table :—

- (1) Chairman's Address.
- (2) Honorary Secretary's Report.
- (3) Accounts.
- (4) Addresses by Mr. D. G. Munro and Dr. W. S. Shaw.
- (5) Reports of Control Members for Srivilliputtur and Palamcottah.
- (6) Report of Sri Mulam Delegate.
- (7) Report of Member of Travancore Combined Planters' Association.
- (8) Alteration to K.D.P.A. Labour Rules.
- (9) War Memorial Upkeep.
- (10) U.P.A.S.I. Sports Club.
- (11) Election of Chairman, Honorary Secretary, Committee, Auditor, and Control Members for Srivilliputtur and Palamcottah.

CHAIRMAN'S ADDRESS

' GENTLEMEN,

' In gathering together to-day for the Annual General Meeting of our Association; we are able to look back upon another very satisfactory year for the Planting Industry, and to congratulate ourselves upon being fortunate enough to be connected with one of the very few industries which are in a flourishing condition at the present time. The major portion of our interests is with Tea, and that has been perhaps the most

'satisfactory branch of the industry ; certainly much more steady than rubber, and we have been spared the vicissitudes which have marked the course of that product during the past few months.

'Looking ahead, so far as one can foresee, prosperity seems assured ; but those of us who have been connected with planting longest, know that fluctuations are bound to recur, and that it is well to be on the alert for possible developments. They are not far to seek. I have just returned from a tour covering a good stretch of South India, and in every direction evidence of very considerable activity in the opening of land in Tea is apparent. We know, of course, that it is a matter of years before new areas can be brought into bearing, but the call for Labour will soon become apparent. This will be enhanced by the railway extensions in progress in our vicinity, some of which actually pass through districts from which the members of this Association recruit largely. It is in this connection that the first assault upon our present strong position is likely to occur, and wisdom dictates that every possible effort should be made to consolidate the fine Labour force which has been built up in this District.

'We are unexpectedly fortunate in having Mr. D. G. Munro and Dr. W. S. Shaw with us to-day. They are making a tour of the District, and very kindly acceded to our request to attend this Meeting.

'A little later in the proceedings, I hope they will have something to say to us, and I feel sure that they will receive your very careful attention.

'During the year a number of subjects of considerable importance have engaged the attention of the Association and more particularly of those members whom you elected to serve on the Committee. These matters will be dealt with in the Report which the Honorary Secretary will place before you shortly, but I wish to express my thanks to the Committee for the very cordial support they have accorded to me since I found myself, rather unexpectedly, in the position of Chairman of the Association, and for the great pains they have taken to give these matters the consideration they required. To a perhaps even greater extent, I am indebted to our energetic Honorary Secretary, Mr. H. J. Watson ; and to him my thanks are tendered most heartily for all the hard work he has done.'

HONORARY SECRETARY'S REPORT

MR. CHAIRMAN AND GENTLEMEN,

'I beg to place before you my Report on the working of the Association for the past year.

'There are 34 Members on the Register who represent a total acreage of 24,625 acres of which 22,947½ acres are Tea, 685 acres are Coffee, 557 acres are Cardamoms and 435¾ acres are Cinchona.

'*Tea Crop*.—The crop secured during the Association's year to March 31 amounts to 13,462,396 lbs., the yield per acre being 587 lbs. The immature area was as usual, included when arriving at the latter figure.

'The usual quarterly statement has been regularly sent to the Secretary, U.P.A.S.I., Madras, and I take this opportunity of thanking members for the promptness with which they have furnished the necessary figures.

'*Meetings*.—During the year 8 Committee Meetings and the Bi-Annual General Meeting have been held. Delegates were present at the 32nd Annual Meeting of the U.P.A.S.I. at Bangalore, and the U.P.A.S.I. General Committee Meeting at Ooty.

'Sri-Mulam Popular Assembly and Travancore Combined Planters' Association.—Mr. A. J. Wright again represented our interests at these meetings, and we shall have pleasure in hearing his Report later on. This Association has to congratulate him on his again being elected Chairman of the Travancore Combined Planters' Association.

'Medical Grants.—The grants in respect of the three Grant-in-Aid dispensaries have been regularly paid, and our thanks are due to Her Highness' Government for this continued concession.

'Lady Ampthill Nursing Institute. A subscription of Rs. 800 has been paid by this Association and I believe I am right in saying that members appreciate the services of the Institute.

'Roads and Bridges.—The Bodi Mettu Ghaut Road maintenance grant arrived too late to be included in the accounts for the year under review, but has since been collected and paid.

The Roads of the District are in fair order and the excellent bridges erected by the Kanan Devan Hills Produce Co., must be a source of pride to all of us. It is to be hoped that Government have marked their excellence both in regard to workmanship and the celerity with which they were erected. It is to be regretted that another monsoon will soon be on us, and most of the temporary repairs on the Government Roads done after the floods in July 1924 have had little or no consolidation.

'Inter District Sports, etc.—The Association was again represented at the Inter District Tennis and Golf. Messrs. Pinches, Hawkins and H. Swayne represented us at Tennis, and Messrs. Holden and Laird at Golf. The District also sent in a Rugger Team for the Carver Cup which was beaten in final by the Anamalais. Our thanks are due to all who took part in the sports.

'South India Planters' Benevolent Fund.—There are now 52 members and 2 estates subscribing to the Fund, out of a total of 70 eligible members in the District and Rs. 596 was subscribed. I would like to add that it ought to be possible for this District to have 100 per cent subscribing, as the small subscription of Rs. 10 annually could surely be spared even by the youngest Assistant.

'Cess.—All subscriptions have been paid during the year, and I have to thank members for the promptness with which this has been done.

'Accounts.—A copy of the Revenue and Expenditure account and this Balance Sheet has been circulated, and the Auditor's certified copy is on the table together with the Association's books for members to scrutinize who may wish to do so. The financial position of the Association is sound, and I trust that the accounts will be approved and passed later. It will be noticed that the difference between the Opening Balance in Revenue and Expenditure account and the Closing Balance is Rs. 319-1-5. In other words Expenditure exceeded Income by that amount. This is accounted for by the fact that delegates' expenses to U. P. A. S. I. meetings during the year amounted to Rs. 1,027-5-4 as compared with Rs. 382-8-0 the previous year; it so happening that Delegates' Expenses were extremely low in that year.

'Labour Department.—The past year was the first year of the new arrangement whereby it is optional to support the Department or not. With the exception of some 1,827 acres the Association supports the Department with all its acreage. The cost per acre of the Labour Department alone was Rs. 2-2-0 for Tea and 8½ annas for Minor Products and until more members of the U. P. A. S. I. in other Districts support the Department it looks as if the subscriptions must remain at or about this high

' figure. The Association has been ably represented on the Control Committees, by Mr. J. S. B. Wallace and Mr. A. J. Wright—Srivilliputtur and Palamcottah respectively, and we will have pleasure in having their Reports later. I am sure the Control Members will welcome any suggestions from members. During the year the following are the most important matters dealt with by the U. P. A. S. I. :—Free passages have been granted to the wives of European employees of the Labour Department. A provident fund for all U. P. A. S. I. European officials has been started, a new scale of salaries for Labour Department European Superintendents and Assistant Superintendents is under consideration, and a provident fund for Indian employees is now being discussed.

' Before placing my resignation in your hands, I would like to thank the Chairman and Committee for all the help they have given me during the year.'

Accounts.—After discussion on one or two items Mr. M. C. Koechlin proposed and Mr. H. L. Pinches seconded that the accounts be passed.

Carried 'nem con'.

The Chairman called upon Mr. D. G. Munro to address the Meeting. Mr. Munro chose Branch Canker and Die-Back in Tea as his subject, which proved most interesting and instructive. Many members had questions to ask Mr. Munro at the close of his address.

Dr. Shaw thereafter spoke briefly on Root Rot, and suggested a possible remedy which had not yet been tried on a large scale. This consisted of eliminating the dead and dying bushes as far as possible and allowing the healthy bushes in the diseased patches and a fringe of healthy bushes round about to become fallow. Infilling can be done later when convenient. Both Mr. Munro and Dr. Shaw thanked Members for their hospitality while in the District. A hearty vote of thanks was accorded by the Meeting to Mr. Munro and Dr. Shaw for their instructive addresses.

Reports of Control Members for Srivilliputtur and Palamcottah; the Report of the Sri Mulam Delegate; and the Report of the Member of the Travancore Combined Planters' Association were taken as read, and the Chairman remarked that the various members and delegates could take this proceeding to mean that the Association passed a vote of confidence in them.

Mr. Koechlin proposed and Mr. Pinches seconded a hearty vote of thanks to Control Members and Delegates for their good work during the year.

Carried.

Alteration to K. D. P. A. Labour Rules.—The Honorary Secretary duly explained the reason for the alteration which takes the form of an additional Rule as follows :—' No. 2A. It is not permissible under these Rules for any Estate to engage a Head Kangany or a Sub-Kangany whether " in debt or not without the written sanction of the Superintendent of the Estate on which he was last employed." ' After discussion Mr. W. J. Dixson proposed and Mr. J. S. Hawkins seconded that the Rule be passed.

Carried unanimously.

War Memorial Upkeep.—The Honorary Secretary explained that the Association had no funds for upkeep which Mr. C. A. V. Grant had estimated at from Rs. 50 to Rs. 75 per annum and added that the item was placed on the Agenda so that members could decide on how the expenditure should be met. Mr. H. L. Pinches proposed and Mr. M. C. Koechlin seconded that the Association should meet the expenditure yearly from its

funds and that the small amount of Rs. 8-7-4 at credit of the War Memorial account in the Association's books be transferred to the Association's General account.

Carried unanimously.

U.P.A.S.I Sports Club.—Mr. J. S. Hawkins addressed the meeting. He suggested that the venue of Planters' Week be changed from Ooty to Coonoor. Mr. J. S. B. Wallace supported Mr. Hawkins and proposed that Mr. Hawkins be asked to bring the matter up at the next Sports Club meeting. Mr. E. H. Francis seconded the resolution which was carried unanimously.

Election of Office Bearers.—

Albert J. Wright, Esq. : *Chairman.*

H. J. Watson, Esq. : *Honorary Secretary.*

J. S. B. Wallace, Esq. }

A. Yates, Esq. }

H. L. Pinches, Esq. }

Wm. Mackenzie, Esq. }

J. Gray, Esq. }

Committee.

R. Brown, Esq. *Auditor.*

The meeting empowered the new Committee to elect Control Members for Srivilliputtur and Palamcottah.

The Chairman thanked members for the honour they had done him in re-electing him Chairman and he assured them that he would do his best to look after their interests.

With a vote of thanks to the Chair the meeting terminated.

H. JOHN WATSON,
Honorary Secretary.

A. J. WRIGHT,
Chairman.

E. THE SOUTH TRAVANCORE PLANTERS' ASSOCIATION (INCORPORATED)

Minutes of the Annual General Meeting held at the Quilon Club, Quilon, at 10 a.m.,
on Saturday, May 15, 1926

Present

Messrs. E. Hall (*Chairman*), J. B. Cook, R. Branson, A. H. L. White, E. T. C. Farr, T. L. Jackson, A. P. D. Lodge, M. R. Coghlan, H. F. Clayton Daubeny and F. G. Millar (*Honorary Secretary*).

1. The Honorary Secretary read the Notice convening the Meeting.

2. The Minutes of the Quarterly Meeting held on February 6, 1926, having been published in the *Planters' Chronicle*, were taken as read and confirmed.

3. *Report of Delegate to Sri Mulam Assembly.*—Mr. E. T. C. Farr read his report in regard to the condition of certain portions of the Punalur-Vadaserikara Road ; and the great inconvenience and loss due to the breaches in the South Indian Railway line near Sermadevi which occur more or less regularly every year.

Proposed from the Chair that a vote of thanks be accorded to Mr. Farr for his services.

Carried.

4. *Report of Delegate to U.P.A.S.I. General Meeting, Ootacamund, on February 23, 1926.*—Mr. A. P. D. Lodge made his report in regard to this meeting; and after certain questions had been asked in regard to 'Currency Notes' and 'Cochin Port Trust—Planters' Trustee' it was proposed from the Chair that a vote of thanks be given to Mr. Lodge for his services.

Carried.

5. *Delegate's Expenses to Sri Mulam and U.P.A.S.I. General Committee Meeting.*—Proposed by Mr. Cook and seconded by Mr. Coghlan that Rs. 100 and Rs. 261-1-0 be paid to Messrs. Farr and Lodge.

Carried.

6. *U. P. A. S. I. Labour Department: Terms of Employment of European Employees.*—The Chairman pointed out to the Meeting that it was desirable before coming to any decision that every member of the Association should be furnished with a copy of the papers relating to the scheme, as there were many points which required careful consideration. The Honorary Secretary was therefore instructed to write to the Acting Director, Labour Department, and ask for further copies of the papers for distribution.

7. *European Employees' Provident Fund.*—The Honorary Secretary was asked to obtain further copies of the 'Rules and Regulations' from the Secretary, U. P. A. S. I.; to enable the Members to study these before the next meeting in August.

8. *Rubber Growers' Association, South Indian Branch.*—The Honorary Secretary read Mr. L. A. Lampard's report dated April 16 on the R.G.A. Meeting held at Cochin on April 10, in which various points in connection with the Advisory Committee and Aneikolam Experimental Station were explained.

Proposed by Mr. Lodge and seconded by Mr. E. Hall that a vote of thanks be accorded to Mr. Lampard for his report and for attending the meeting at Cochin.

Carried.

9. The Honorary Secretary then read the following short report on the working of the Association for year ending March 31, 1926:—

'MR. CHAIRMAN AND GENTLEMEN,

I have the honour to make the following report on the working of the Association:—

1. *Membership.*—The membership of the Association consists of 15 Estates, 16 personal members, and 2 honorary members.

2. *Subscribing Acreage.*—The acreage under Tea was 5,169 and under Rubber 8,375; making a total of 13,544.

3. *U. P. A. S. I. Labour Department.*—Out of the above 13,544 acres; 3,033 acres under Tea and 1,233 acres under Rubber subscribed to the Labour Department.

4. *Committee.*—The following Committee were elected at the Annual General Meeting in May 1925. Messrs. E. Hall (*Chairman*), J. B. Cook, E. T. C. Farr, R. N. W. Jodrell and F. G. Millar (*Honorary Secretary*). Mr. Jodrell left on furlough in November and his place was left unfilled.

5. *Meetings.*—One Annual General Meeting and 3 General Meetings were held at Quilon during the year under review. The average attendance was eleven. Delegates represented this Association at the U. P. A. S. I. Annual Meeting at Bangalore in August; at the Sri Mulam Popular Assembly and at the U. P. A. S. I. General Meeting in February.

6. *Incorporation*.—Certificate of Incorporation was received from Registrar of Joint Stock Companies, Trivandrum, on May 19, 1925. Copies of Memorandum and Articles of Association were sent to all members.

7. *Lady Ampthill Nursing Institute, Madras*.—During the year a donation of Rs. 375 was contributed to the funds of this institution.

8. *Crop Returns*.—Quarterly Tea Crop figures were collected by the Honorary Secretary, and forwarded to the Secretary, U.P.A.S.I., Madras. Quarterly Rubber Returns were collected direct from Madras.

9. *Cess*.—Subscription payable to U.P.A.S.I. has been collected quarterly and forwarded to Madras. The work of your Honorary Secretary has been facilitated by prompt payment on the part of subscribers.

10. *Rubber Growers' Association (S.I. Branch) Local Committee*.—Mr. L. A. Lampard was elected as the Association's representative on the R.G.A. Local Committee, under the new scheme.

11. *Accounts*.—These have been audited by Mr. Marthanda Pillai; and copies of the Income and Expenditure Account and Balance Sheet have been placed on the table.

12. *General*.—During the year the work of the Association has gone forward smoothly. My thanks are due to our Chairman and Committee and to Messrs. Harrisons & Crosfield, Ltd., Finance and Accounts Department, Quilon, for their assistance during the year.

I now beg to place my resignation in your hands.'

10. *Accounts*.—Printed copies of the audited accounts were placed on the table showing a credit balance of Rs. 454-6-9 at the end of the financial year. After various items in the accounts had been explained; it was proposed by Mr. Cook and seconded by Mr. Farr that the Income and Expenditure Accounts and Balance Sheet be passed.

Carried.

11. *Budget for Year ending March 31, 1927*.—Detailed copies of estimated Income and Expenditure for the coming year were examined by the members; and, after some discussion, it was proposed by Mr. Lodge and seconded by Mr. Jackson that the Budget be passed.

Carried.

12. *Local Cess*.—Proposed by Mr. Farr and seconded by Mr. Jackson that the Honorary Secretary be authorized to call up a local cess of 2 annas per acre to cover the Association's expenditure during the coming year.

Carried.

The Chairman addressed the Meeting and asked the members to pass a hearty vote of thanks to the Honorary Secretary for the interest he had shown in the work of the Association during the past year.

Carried.

Mr. J. B. Cook, in a felicitous speech, said that they were greatly indebted to their Chairman for the able way in which he had carried out the duties of the Chair during the year. (*Applause*).

The following Office Bearers were then elected:—

Mr. T. L. Jackson: *Chairman*.

„ F. G. Millar: *Honorary Secretary*.

Messrs. J. B. Cook

E. T. C. Farr

A. H. L. White

} *Committee.*

It was proposed from the Chair that Mr. Marthanda Pillai be appointed Auditor for the current year at a fee of Rs. 30.

Carried.

The Honorary Secretary was pleased to intimate that the Shaliacary, Sittar and Perianad Estates of The Rani Travancore Rubber Co., Ltd., had applied for membership of the Association, and that the Ballot would take place at the close of the Meeting.

With a vote of thanks to the Chair the Meeting terminated.

F. G. MILLAR,
Honorary Secretary.

THOS. L. JACKSON,
Chairman.

LETTER TO THE EDITOR

(The 'Planters' Chronicle' is not responsible for the opinion of its correspondents.)

A Planters' Tennis Association

(IN CONJUNCTION WITH THE U.P.A.S.I. SPORTS CLUB.)

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

In Assam it is the custom for each planting district to send into a headquarters station (Dibrugarh I think) a list of all the members of the district; giving the tennis handicaps allotted to each. From these District Lists an amalgamated 'All-Districts' List is compiled, and circulated to every district in booklet form.

In this way, if a member is transferred from one district to another the secretary of his new district can at once ascertain his tennis handicap, by referring to the small booklet that is issued each year.

In South India there is, I think, (though I am open to correction) no Tennis Association that affects the Planter, pure and simple; but there is no reason why say, the Annamalais, High Range, the various Travancore districts, Malabar, Nilgiris, Nilgiri-Wynaad, Wynaad, Mysore and Coorg, etc., could not prepare lists of all the men (and ladies too) in their district giving their tennis handicap.

A Sub-Committee of the U.P.A.S.I. Sports Club could then collect these, and have them printed (in small book form) and sent to each district. If further copies were wanted they could be had on a small payment. Such a booklet would certainly be a great help for the Ooty and Bangalore tournaments; and if, for example, a member of the Annamalais happened to find himself in Mysore when a tennis meet was about to be held, the Secretary of the Mysore Club would have his handicap straight off.

I think the suggestion should be worth the consideration of the U. P. A. S. I. Sports Club!

COORG,
May 30, 1926.

Yours, etc.,
HANDICAPS.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending May 29, 1926

Bank Selling Demand Draft on London

24th	25th	26th	27th	28th	29th
17 27/32d.	17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending May 1, 1926	January 1 to May 1, 1926	January 1 to May 1, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING MAY 1, 1926)			N. India.	1 7·97	1 9·20	1 6·37
			S. India	**1 10·05	††1 9·75	††1 6·36
(a) Anamalais—			Ceylon...	1 10·28	1 10·49	1 8·18
Karakundru ...	49	1 11½	Java ...	1 4·85	1 5·53	1 1·06
Thayamudi ...	156	1 10	Sumatra.	Nil.	1 7·80	1 4·28
Mukkottumudi ...	199	1 9¾	Nyassa-land.	1 6·24	1 6·79	1 3·35
(b) Kanan Devans—			Total ...	*1 8·24	†1 9·26	†1 6·35
Perriavurrai ...	242	1 10¾				
Yellapatti ...	122	1 10½				
Letchmi ...	226	1 9¾				
Guderalé ...	93	1 9¼				
(c) Niligiri-Wynaad—						
Daverashola ...	210	1 9¾				

(B) COFFEE

SPECIAL CABLE, LONDON, JUNE 2, 1926
'A' QUALITY 149 s. MARKET FIRM

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tues. day, June 1, 1926, was 20½d.

** Based on 1,519 packages.

†† " " 59,831 "

†† " " 59,091 "

* Based on 75,443 packages.

† " " 1,175,358 "

† " " 838,671 "

(b) *Précis of Report on the London Tea Market received on Monday, May 31, and covering the week ending Saturday, May 1 :—*

The market showed a good deal of hesitation on account of the uncertainty of the industrial outlook, and in the result most of the prices realized showed a drop (of from $\frac{1}{2}d.$ per pound for the lower to $1d.$ per pound for the higher grades) on the figures realized during the preceding week. The average fall in the price of all the tea on offer was $0.42d.$ per pound; and it is interesting to note that South Indians shared with Nyazalands the distinction of being the only two countries which showed increased average prices (of respectively $0.79d.$ and $0.12d.$ per pound): The average prices for Ceylons, Northern Indians and Javas respectively showing falls of $0.49d.$, $0.48d.$, and $0.21d.$ as compared with the figures for the previous week. The following table analyses the shipments of tea in lbs. from Southern India during the last four calendar years :—

Destination			1925	1924	1923	1922
United Kingdom	...	...	38,021,997	33,047,525	32,707,872	25,820,256
Colombo	...	...	4,217,850	3,617,235	3,580,654	2,175,604
Bombay and Persia	...	...	544,159	1,057,713	753,865	53,993
United States	...	...	93,778	142,910	123,284	1,065
Canada	...	...	...	...	...	766,759
Australia	...	...	...	...	...	553
Russia	...	...	...	...	...	...
Sundry Ports	...	...	1,071,064	89,019	51,267	699,691
Total			43,948,848	37,954,402	37,216,942	29,517,921

The actual South Indian 1925 Production was some 48,000,000 lbs.; so that it would appear that something approaching 10 per cent of the total crop (though of course allowance must be made for tea in store and awaiting shipment) is consumed in India itself.

III. Weekly Rainfall Statement

From Sunday, May 23, 1926, to Saturday, May 29, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	0.23	15.60	15.83	19. Coonoor ...	0.07	3.77	3.84
2. Kalthuritty.	1.16	14.72	15.88	20. Kotagiri ...	1.63	3.71	5.34
3. Tenmalai ...	0.48	13.88	14.36	21. Ootacamund	0.48	10.13	10.61
4. Mundakayam.	3.88	13.30	17.18	22. Yercaud ...	1.65	4.51	6.16
5. Peermade...	0.25	13.66	13.91	23. Devala ...	...	3.27	3.27
6. Twyford ...	0.47	14.24	14.71	24. Gudalur ...	...	2.80	2.80
7. V'periyar ...	0.03	6.39	6.42	25. CALICUT ...	0.07	6.65	6.72
8. Kalaar ...	1.31	9.23	10.54	26. Kuttiyadi ...	0.37	5.91	6.28
9. Chittuvurrai	1.31	7.95	9.26	27. Vayittiri ...	...	4.56	4.56
10. BODI'KANUR	...	3.22	3.22	28. Manantoddi.	...	3.48	3.48
11. COCHIN ...	1.90	10.82	12.72	29. Billigiris ...	0.15	5.70	5.85
12. Mooply Valley.	0.74	9.47	10.21	30. Sidapur ...	1.33	8.27	9.60
13. Pachaimalai	0.14	9.19	9.33	31. Pollibetta...	0.55	4.91	5.46
14. Mudis ...	3.64	9.65	13.29	32. Somwarpett	0.08	N.R.	N.R.
15. POLLACHIE.	...	4.52	4.52	33. Ballupete ...	0.47	1.48	1.95
16. Manjeri ...	0.04	6.78	6.82	34. MANGALORE.	...	1.21	1.21
17. Nilambur ...	0.09	N.R.	N.R.	35. MADRAS ...	...	0.20	0.20
18. Naduvattam	0.02	3.22	3.24				

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 24] SAT., JUNE 12, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 385	U.P.A.S.C. Notice ...	391
The New Rugby Rules ...	387	Mysore P. A. Meeting ...	392
Aesthetics of Rugby ...	389	Commercial and Meteorologi- cal ...	397

EDITORIAL NOTES

Ruggerites will be interested in the account which we publish elsewhere of the outcome of the deliberations of the Special Committee which was appointed last year to redraft the English Rugby Union Rules. It is taken from *The Athletic News* and is the only reference to the subject which we have so far seen in the Press. The new rules regarding scrums seem to be the only ones which may appreciably affect the mode of play which obtains to-day : the rule regarding off side at a Throw-in, for example, has surely always been a recognised, even if unwritten, law. We also reproduce this week from *The Observer* a very fine descriptive sketch of the Rugby Game.

The Secretary of the U.P.A.S.I. asks us to say that he would be very glad if those who possess a copy of the 1925 edition of THE PLANTING DIRECTORY OF SOUTHERN INDIA would, after reference to any entries with which they are concerned, advise him of any amendments and additions which should be made in the new edition of the book which is to be published in September next. Prompt compliance with this request would materially help the Secretary to secure in the new edition that absolute accuracy which he himself, as Compiler, is naturally most anxious to achieve.

The Ceylon Press publishes the minutes of a meeting of the Board of Indian Immigrant Labour held on the 2nd instant at which was tabled the agreement arrived at between the Governments of India and of Ceylon regarding a Standard Wage for Ceylon estates. The minimum wages in Ceylon cents for men, women, and children, in the Up Country, Mid Country, and Low Country respectively are fixed at 54, 43, 32 ; 52, 41, 31 ; and 50, 40 and 30. Male adults, and widows with children who have not arrived at working age, are to receive (presumably each month) 1/8th bushel of rice free of charge ; and

Superintendents are bound to supply their labour at Rs. 6.40 per bushel with any rice they may require over and above the amount issued free of cost. The Labourer in Ceylon is already given free housing, medical aid, and firewood, and also enjoys various concessions such as substantial maternity benefits; so that his position on an estate where he is sure of at least six days' work every week is vastly better than that he would have held if he had not gone to work on an estate. The agreement between the Governments stipulates that no Indian labourers should be compelled to do piece work if they prefer to do time work; and provides for six months' notice to the Government of India of any changes—other than modifications in harmony with the cost of living—which it may be proposed to make in the standard wage.

The Acting Director of the U.P.A.S.I. Labour Department asks us to announce that the Vasudevanallur Agent, Mr. W. S. Ramaswamy Iyer, has been transferred to the Watrap Agency, vice Mr. V. Perumal Konar deceased; and that Mr. K. M. S. Yusuf Sahib (who is a son of the Puliangudi Agent Mr. K. M. S. Hameed Sahib) took charge of the Vasudevanallur Agency on June 1, 1926.

The British Colonial Office has issued the following Statement of the Exports of Coffee from British Colonies in 1913 and in 1924:—

British Dominions' Coffee Exports	1913		1924		1913		1924	
	Cwt.		Cwt.		Cwt.		Cwt.	
Uganda Protectorate ...	12,252		199,504		92		4,580	
Kenya Colony and Pro- tectorate	5,501				1,715		422	
Tanganyika Territory ...	nil.		105,222		153		89	
Malay States ...	14,580		97,565		187		15	
Jamaica ...	58,194		51,921		10		5	
Trinidad ...	20		4,626		88		1	
					798		nil.	

Had the South Indian figure been included it would have topped the list by a comfortable margin; for we find on referring to Page 114 of the 1925 volume of *The Planters' Chronicle* that the Exports of Coffee from South India amounted to 218,200 cwts. during the calendar year 1924.

The London Tea Brokers' Association give the following figures as the exports in lbs. of tea from the principal producing countries during the past three years:—

Country of Export				1925	1924	1923
Northern India	...	...	...	304,544,265	314,845,387	308,256,675
Ceylon	...	...	...	205,493,536	199,680,013	179,501,928
Java	...	...	...	94,037,988	104,222,090	89,378,322
China	...	...	...	*86,000,000	102,134,409	106,856,100
Southern India	...	...	...	43,948,848	37,954,402	37,216,942
Japan	...	...	...	27,759,600	22,475,200	27,085,520
Formosa	...	...	...	20,842,800	20,508,400	20,257,600
Sumatra	...	...	...	16,654,053	17,954,344	16,485,176
Nyasaland	...	...	...	1,114,633	1,058,504	1,020,000
Total	..			800,395,723	820,832,749	786,058,263

* Estimated.

ENGLISH RUGBY UNION

New Rules

The Special Committee entrusted with the task of redrafting the rules of the Rugby Union is to be congratulated upon the way it has tackled a job that had been made almost imperative by the notes and additions that have had to be made to the old rules.

It will be found that the new rules will be divided into three parts :—

1. Definitions and glossary of terms ;
2. Preliminary ; and
3. The play in detail.

The first part deals with the Rugby terms and the meaning that has been assigned to them ; the second with instructions as to the marking out of the ground, the size of the ball the method of scoring, length of time, and the functions of the referee and the touch judges ; the third with the rules governing the actual play.

Some of the definitions in part one do not differ from those already in existence, but in the main they are clearer and bear obvious signs of careful thought by practical men.

POWERS OF REFEREES

It is not without interest to note, for instance, that hitherto we have had no definition of a kick which we are now told 'is made by propelling the ball with the foot, knee or lower part of the leg,' while No Side is 'the end of the game.'

It is impossible in the space of a news paper article to deal with the revisions in any way fully, but, so far as the functions of the referee are concerned, the new Laws will be found to contain three interesting items :—

A referee may (not, it will be noted, must) allow extra time for delays.

He has power to stop the game before time has expired if, in his opinion, full time cannot be played ; and

In the case of his being unable to officiate during the whole period of the game, he shall have power to appoint a substitute to take his place, failing an agreement by the captains of the respective sides.

Our old friend the scrummage naturally comes in for a large share of attention, the most important alteration being phrased as follows :—

No player shall, after the scrummage has been formed, join the front rank of his forwards before the ball has been put in.

CONTROL OF SCRUMMAGES

There is thus no stipulation as to the number of men who may form the front row ; the new rule prevents a man who starts in the second or the third row moving up to the front row at the last moment.

According to the rule hitherto in vogue, it was 'illegal for more than three players on each side to form the front row of their forwards before the ball is put into the scrummage.'

There are these two variations regarding the ball and the scrummage :—

The ball is not fairly in the scrummage until it has been put in straight, has touched the ground and passed both feet of a player of each team ; and

The ball is not fairly in the scrummage if it pass straight through or if it enter the scrummage and be immediately kicked out at either side.

No more will the voice of the halfback 'Coming in right,' 'Coming in left,' be heard in the land. In future 'No player shall, by speech of otherwise, give information as to how or when the ball is being put into the scrummage.'

There is an addition to the off side regulations : ' No player must stand in front of a line at right angles to the touch-line when the ball is being thrown in from touch ; the penalty for this infringement will be a free kick.'

Referees throughout the country will be busy during the summer months assimilating the changes.

OUR CORRESPONDENT'S—'MERCIAN'S'—VIEWS

' Rugby folk throughout the country appear to have been greatly interested in the announcement of the changed rules which will come into operation subject to the approval of the various countries, next season. They are not exactly revolutionary, for the committee entrusted with the task of revision were not expected to be revolutionists.

At a rough computation I should say that between the old rules—including those drawn up by the International Board in a "circular letter issued to players and referees with a view of securing uniformity on rulings, 1911, revised 1920 and 1925"—and the revised ones, which include the Board's points, nearly four thousand words have been saved.

The system adopted was as follows: Mr. G. F. Berney, of Survey, prepared the groundwork of the changes, and then Messrs. Mark Waters and Earnest Prescott, both past presidents of the Union, also applied the blue pencil. Then the Laws Committee took charge.

This committee met on alternate Fridays from October onwards. The general custom was for the members to meet at half-past ten in the morning and to remain together until half-past five in the evening. The general construction of the book having been agreed upon, the rules were fought out line by line.

SEARCH FOR UNANIMITY

Two of the main alterations concern the placing of the ball in the scrummages and the number of men up in the front row. In this last season the half-back of the non-offending side had the right to put the ball in on whichever side of the scrummage he preferred. It was not a popular preference with the referees who naturally, had to chase the half-back, if he wanted to see the ball put in properly, rather than make the half-back chase him.

This rule, therefore, will not be in existence next winter. Its deletion may probably be written down as the expression of a desire to secure unanimity among all the Unions.

And presumably, the same reason operates regarding the number of the men up in the front row. Referees with whom I have discussed the change express some little doubt as to how the absence of a rule for regulating the number of men in the front row will work out.

According to the new rule no player will be allowed to join the front row after the scrummage has been formed. A scrummage, as before, "is formed by one or more players from each side closing round the ball when it is on the ground."

Strict referees—and some referees of the type who do not mind spoiling a game just to emphasize their knowledge of the rules—under the wilful waste of time penalty clause, will be able to insist on the first man up going down and after that, no addition can be made to the front row.

Some mystification exists as to the reasons which have led the committee to make it illegal to indicate, "by speech or otherwise," which side the ball is coming into the scrummage. It obviously cannot be because there is a wish for the game to be played in complete silence; otherwise an equally plain hint would have been given to talkative players generally.

One explanation is that the idea is to do away with those little signals practised by certain teams which may be considered not in accordance with the best spirit of Rugby. It is also likely that the prohibition will reduce the temptation of the outside forward to get his leg up too quickly.

HUMOROUS RULING RECALLED

The slight variation in the wording of one clause will probably recall to the mind of the surviving members of the old Broughton Rangers team a little incident that occurred a good many years ago. "In case of any dispute relative to a try or a kick at goal, where it is possible that an appeal may be made to this Union, the referee should allow the kick at goal, so that if the Union afterwards support the appeal, the goal points may be added, if the kick were successful."

When some thirty years ago, Broughton Rangers were engaged in a match with I think, Salford, their opponents so disputed a try that they refused to allow the kick to be taken. The matter was referred to the Rugby Union, who decided that the Rangers might go down to the ground at any time they chose and take the shot. History does not record that the interesting spectacle of the players solemnly taking the field for the sake of one kick was ever seen.'

'Athletic News.'

RUGBY FOOTBALL

Aesthetically Viewed

Who is this that cometh from Murrayfield, with dyed garments from Twickenham? His jersey is torn to the waist. He has smeared his bloody nose with his hands and wiped them on his trousers. His stockings are down about his boots. His countenance is flushed, haggard, and fierce, not yet smoothed out for polite society. He is foul with mud and all unlovely. Nobody would take him for an aesthete, and yet (as I hope to show) he is a mine of aesthetics.

To the uninitiated the Rugby game is a savage and haphazard scramble, redeemed by moments of excitement. To the expert every movement has its meaning, and every moment its thrill. Even in a poor game, his inward eye perceives the blundered purpose, and the silly failure is but the distorted shadow of success.

We cannot all be experts, even theoretical ones, but many of us who fall short of this have our consolation. We love the game with a fervour that is usually reserved for some appealing forms of art after a fashion surprisingly similar. We see beauty in it, not only beauty of physical effort, but of the movements resulting from those efforts, and beyond them, a beauty of design and pattern sketched by those movements on the field of play, or on the accommodating canvas of our minds. You know those books on Rugby football, wherein are worked out schemes of attack for the undoing of a hapless enemy. With dotted lines and curves and all manner of fascinating whirligigs they show the course of man and ball. Even so are the great features of a match inscribed on my heart. As far as back play is concerned, our design will be a more elaborate one than of yore. Many a match was won in olden days (and of course, may still be won) by simple methods. Quick passing, accurate and perfectly timed acceptance at full speed, and straight running did the trick. Nowadays we often weave a complicated pattern. To outcount and outmanoeuvre a defence that is prepared for all the master moves, we dance a mazy figure.

Think of the subtle divergence of a swerve, the startling zigzag of a dodge that leaves two or three men gaping foolishly, the sickle-swooping elude, the sheer cut through, the 'dummy' and the rarer 'double dummy.' How often we catch ourselves crying 'Beautiful' in pure delight—an unconscious tribute to aesthetics as much as to successful art.

We have so far been working our pleasure in the space dimensions, but have you ever considered how great a part is played by, and in, Time? Why, half the effect lies there. Watch this scrum. The ball is hanging a thought too long in the back row. Our scrum half is visibly itching for it; his opposite number, just and only just on-side, is watching him as a cat the mouse. It's out—he's got it—he's down! Not so the ball, for which apply to our out-half, now speeding away on his lawful occasions. A matter of seconds or fractions of seconds, you perceive, and yet how the whole game waits on them.

For aesthetic purposes a miss is as good as a mile any day; and though a cleanly executed tackle is a noble sight, one that fails splendidly by inches is often as good to see. It is possible to miss your man beautifully. There goes exaltant speed tearing along the touch-line, and grim pursuit all out to cut him off. Mark where their lines converge. As one in full career spurns the fatal spot behind him, the other launches himself despairingly at those flying feet, Missed! The One goes on to his appointed goal; the other is turning catherine wheels in touch, quite unregarded of the roaring crowd.

But all this time we have been speaking of back play, what the cities call 'spectacular' play. We are not forgetting the forwards, not for one moment. Here is spectacle enough for those that can see; but the misery of it is that the play is not always on our particular bit of touch-line. Some of the best things are lost to us in the scrum—much of the delicate adroit timing and finesse of hooking and getting possession and manipulating—tut, tut!—pedipulating the ball. Still, far too much attractive play is given to the centre of the field or wasted on those howling lunatics on the further rails. We must admit, too, that experience and knowledge of the game are needed before one can appreciate forward play. The novice sees only a straining, heaving, grunting mass grinding and swirling in a fog of steam as thick porridge stirred, about and over a ball that is nobody knows where. He sees a ragged line-out of untidy, scarlet faced, and horribly jealous couples, elbowing and jumping for a ball that will be a doubtful boon to the man that secures it. He sees a rush and counter-rush of formless, streaming squadrons, hacking and kicking and falling over a ball that can be as easily dribbled with the knee or the chest as with the foot. We should be patient with him. Forward play is rather a mix-up, a 'Bacchi rout and reel and revelry' to him who has not learned its fine points. But there are law and order, form and comeliness, design and pattern in the scrum and out of it. Two nicely matched eights (or sevens if you please), well and truly packed; the ball just hooked, with no intention of presenting it, this time, to 'those—backs'; the whole scrum balanced on the tremendous opposing thrusts and swaying slightly, as if a touch would send it spinning, round—where will you find a more satisfying work of art? The wheeling and screwing processes yield charming convolutions and a good break-away can flood the soul with rapture.

As I said, the best things are too often done where we cannot see them. But as a lesson in how they get done just mark that forward there while you have the chance. Loose, dirty-looking work, and he is in the thick of it, smashing and bashing his way through; a regular demon, is he not? Blind

fury? Not by any means. Look at his feet, now—rising the ball along, keeping it out of touch as deftly as he had not one man's head in his stomach and another's elbow in his eye. There, he's away—no, the half has it—no, steered it right round him—lovely! is it too far fetched to speak of him as one who through the heat of conflict keeps the law in calmness made.

Is it any wonder if at times he is able to move us, beyond expression, out of all whooping, to an intense, and purely aesthetic delight?—*The Observer*.

U.P.A.S.I. SPORTS CLUB

NOTICE

FINANCE.—After payment of all expenses in connection with Planters' Week, the balance carried forward to this financial year (commencing April 1, 1926) is Rs. 2,600. A profit of over Rs. 300 was made on the Fancy Dress Ball at the Assembly Rooms.

CLUB COLOURS.—Suitable designs for the Club badge have been prepared by a Madras Embroidery Firm, and are now going the round of the Committee for final selection.

MEET ALBUM.—This is at present circulating in the Wynaad. The Kanan Devans can expect it shortly. Willie Burke is quite pleased with the orders to date; but I hope he gets many more, as he really has made an excellent album this year.

MADRAS RUGGER TOURNAMENT 1926.—The Committee would, I know, welcome any suggestions from members with regard to selection of the Planters' Team. It is most difficult to appoint a Selection Committee who could know the form of men in all districts.

Meanwhile District Representatives are asked to send in names of outstanding players lately out from Home, and the places in which they play.

CONGRATULATIONS.—Are due to our late Honorary Secretary, Meet Entertainment Committee, Miss Barber, for winning the Ladies' Golf Championship of Southern India.

Her record for the last few months is hard to beat and is as under:—

September, 1925.—Wins the Ladies' Hunt Point to Point at Ooty on her horse 'Florican'.

Planters' Week, 1926.—Wins Mr. Murphy's Ladies' Singles Tennis Cup.

„ Wins Captain Windle's Ladies' Golf Cup.

May 1926.—At Ooty wins the Ladies' Golf Championship of Southern India.

May her luck continue!

DEVERASHOLA,
June 1, 1926,

G. W. FULCHER,
Honorary Secretary.

THE MYSORE PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Sixty-second Annual General Meeting held at the Kadur Club,
Chikmagalur, on Thursday, May 20, 1926.

Present

Mr. E. W. Fowke (*Chairman*), Messrs. A. C. W. Denne, S. H. Dennis, L. P. Kent, N. G. B. Kirwan, R. O. Oliver, W. H. Reed, K. T. Sheshaiya, B.A., LL.B., N. C. Whitton, and M. A. de Weck (*Secretary*).

Visitors

Messrs. G. W. Mayow, J. M. McNab and F. W. Winterbotham.

Notice calling the Meeting was read.

Before beginning the business of the Meeting the Chairman said:—

‘It is my painful duty to refer to the loss this Association has sustained by the death of the following members:—Mr. Sylk of the Giri Estate; and Mr. H. F. Anderson of Kirhally Estate, South Mysore. Also of Captain H. J. L. Fremlin of Bedagali Estate; and Mr. A. F. Evetts of Netrakonda Estate; both of whom were formerly members of the Association.

By the death of Mr. Sylk many of us have lost an old friend, and one whose kindly and courteous manners endeared him to all who knew him. In the death of Mr. Anderson, South Mysore has sustained the loss of one of its oldest planters, and he will be greatly missed by his many friends. By Captain Fremlin's death in England, Mysore has lost one of its finest sportsmen. He served with distinction through the war. He will be greatly missed by his many friends.

Captain Evetts was for many years a member of the North Mysore Planters' Association. He also served through the War in the Oxford and Bucks Light Infantry. He had intended, I believe, to return to Planting.

I propose that the Association passes a vote of sympathy with their relatives in their great loss.’ This was carried all standing.

Executive Committee's Report for period January 1, 1926 to April 30, 1926

The Report was read as under:—

Meetings.—The Association held one Quarterly General Meeting on January 1, 1926.

Collection of Subscriptions.—At the end of the financial year there were Rs. 1,152 of the subscriptions for 1925-26 outstanding.

Defaulters.—Rs. 100 has been collected from one defaulter who owed Rs. 348. It is hoped to collect the balance before 1st June.

Membership and Acreage.—At the commencement of 1925-26 there were 57 members, including 6 Personal Members, representing 89 estates totalling 17,654 acres made up of:—Coffee 17,157. Rubber 110, Minor Products 216 and Tea 171 acres. During the year, owing to sales of estates to non-members, resignations and reduction of acreages, 642 acres have resigned; leaving a total of 17,012 acres. Against this loss of acreage must be put 1,051 new acreage joining so that we start the new

year with 18,063 acres made up of:—Coffee 17,412, Rubber 231, Minor Products 217 and Tea 203 acres.

Coffee Cess, 1924-25.—At the end of the financial year Rs. 247-10-0 were still unpaid by members.

New Rule.—Copies of the new rule with reference to minimum acreage, as passed at the last Quarterly General Meeting, were sent to all members.

Roads and Communications.—As decided at the last Quarterly General Meeting, the Secretary wrote to the Planting Member with reference to the Charmadi Ghaut Road. To which letter a reply has been received. This matter will come up for discussion during the Meeting.

Rewards to those responsible for securing Convictions in Cases of Coffee Thefts.—It was decided that rewards could not be paid there it could not be proved that the stolen coffee belonged to a member of the Association.

E. W. Fowke : *Chairman.*
S. H. Dennis } *Members, Executive Committee.*
Percy Hunt }

The Secretary informed the Meeting that, since the report had been written, Rs. 900 of the outstanding subscriptions for 1925-26 had been paid.

The ruling of the Executive Committee, to the effect that rewards should not be paid to those responsible for securing convictions in cases of coffee thefts where it could not be proved that the stolen coffee belonged to a member of the Association, was discussed. Mr. Kirwan said that, as it was very unusual and, except in certain cases, impossible to prove the ownership of stolen coffee, the effect of this ruling would be to lessen the activity and keenness of those trying to detect such cases. The result would be an increase in such thefts.

Mr. Kirwan then proposed and Mr. Reed seconded, 'That this Meeting does not agree with the ruling of the Executive Committee that rewards for the detection of thefts of coffee should apply only to cases of detection where the stolen coffee belongs to a member of the Association.' This was carried.

The Report was then adopted.

The Chairman's Address

'Gentlemen, It is the custom of your Chairman to make a speech at the Annual General Meeting, a dying swansong. I do not propose to detain you long as it is, as you know, your Secretary who does the work of the Association and I do not wish to encroach on his prerogative. There is nothing of great importance to record in the past year's work of the Association.

I am glad to say a start has been made on the Coffee Experimental Station at Balehonnur on the land kindly given by Mr. C. S. Crawford. I hope the Coffee Industry of South India will benefit greatly by these experiments.

Roads like the poor are always with us, and I regret to say that there has been no improvement in the roads in North Mysore: in fact some of

the main roads like the Boond Ghaut are worse instead of better, and in future, owing to the great increase in the bus services, it will be necessary for the Mysore Government to take serious steps in the matter.

Railway.—The Government of Mysore have decided to make the Railway from Kadur to Chikmagalur, and doubtless there are some amongst the younger members of the Association who will live long enough to catch the 2.30 from Chikmagalur to Bangalore.

Labour for the past season has been plentiful, and doubtless owing to the high price of grain in South Kanara will be so in the coming season. It remains to be seen how the repeal of Act XIII will affect us and it is to be hoped the Mysore Government will give us some act to take its place similar to what the British Government are giving to Coorg.

Crops.—The Coffee Crops for the past season were not good ; but the prices were high so, on the whole, we may consider it was a satisfactory year.

Cardamoms started at a high price, fell, and again rose to Rs. 60 per maund. The price of pepper was very high.

I cannot close without some reference to the new industry which has been started in North Mysore. I refer, of course, to Tea. It is to be hoped that, like Monkey Gland, it will put new life and energy into some Estates which were approaching senile decay, and that it will add to the prosperity of the Planting Districts of Mysore.

In conclusion I should like to thank the Members of the Executive Committee (in their absence), the Members of the Association, and last but not least our Secretary, for their kindness and courtesy shown me in the past year.

I now, gentlemen, place my resignation in your hands.'

Election of New Members.—Proposed from the Chair that Captain R. W. Fremlin, as representing Buskull Estate, be elected a member.

Carried unanimously.

Proposed from the Chair that Major C. C. Couchman, as representing Kul Tota Estate, be elected a member.

Carried unanimously.

Proposed from the Chair that Mr. S. L. Mathias, as representing Balekhan Estate be elected a member. It was objected that Balekhan does not represent half the total acreage of the Mr. Mathias' Estates so that, under Rule 2 as passed at the last Quarterly General Meeting, Mr. Mathias is not eligible. The Secretary was instructed to write and explain the position to him.

Accounts, 1925-26.—The Secretary explained that the audited Balance Sheet had only just been received back from the auditor, so that there had not been time in which to have it printed and copies sent to all members. It was resolved that the matter be deferred to the next Meeting.

Budget for 1926-27.—The Budget was gone through. The Secretary informed the meeting that a saving might be effected if the meeting would give him permission to send all subscription demands and receipts in open envelopes. This was agreed to. The Budget was then passed.

Election of Auditor for 1926-27.—Mr. D. Mahabala Rao, M.A., was re-elected.

Report of Member attending General Committee Meeting of U.P.A.S.I., held at Ootacamund on 22-2-26.—Unfortunately Mr. Lake, who kindly attended the meeting on behalf of this Association, was unable to be present at this meeting having to attend a meeting at Ootacamund.

Rewards to those instrumental in securing Convictions in Cases of Coffee Stealing.—Letters, dated February 23 and March 14 from Major Russell were read to the Meeting. It was decided that the case put forward by Major Russell merited a reward. The Secretary was instructed to send Major Russell Rs. 60 for distribution, as thought fit, among the three persons mentioned in his letters.

Thefts and Non-delivery of Uploads from the Cost by Cartmen.—Captain Nixon's letter of March 28, Mr. Godwin Bower's of April 29, and correspondence with the Coorg Planters' Association were read to the Meeting. It was decided that everything must be done, in co-operation with the Coorg Planters' Association, to secure a conviction so as to put a stop to a practice which, if not checked, will certainly increase. The Secretary therefore, was instructed to inform the Coorg Planters' Association that this Association is willing to share the cost of prosecution in the case mentioned in their letter of April 22.

Act I of 1903.—Mr. Dennis then read his report on the Meeting held at Ootacamund on February 24 and 25 to consider the amendment of Act I of 1903. This Meeting was attended by the Representatives from the Mysore Nilgri-Wynaad, and Wynaad Associations; and by the Chairman, Planting Member and Secretary of the U. P. A. S. I.

A vote of thanks to Mr. Dennis for his able representation was passed.

Report of Members on the Governing Body of the Sanderson Memorial Ward.—As no member had a report to make, the Proceedings of a meeting of the Governing Body held on February 8 were read to the Meeting.

Charmadi Ghaut Road.—Read letter from Captain Windle, M. L. C., in reply to the Secretary's letter with reference to the taking over by Government of the South Kanara portion of the Charmadi Ghaut Road as a Trunk road. In view of Captain Windle's reply it was decided that nothing further could be done at present.

Labour Department.—A letter dated May 13, from the Superintendent, Mysore Division, with reference to non-attendance at Meetings of Control Committees of Control Committee members or members-in-waiting was read. The Secretary explained that it was quite useless for him to ask any other member to attend unless he was able to give full instructions as to the subject to be discussed: this, he added, was impossible unless he received copies of correspondence and notice of meetings. The following resolution was put from the Chair and carried:—

'That the Superintendents, Labour Department of the Divisions, concerned be requested to send the Secretary copies of all correspondence between themselves and the members of the Control Committees.'

Terms of Employment of European Employees' and Indian Employees' Provident Fund.—In view of the necessity for these matters to be more carefully gone into than is possible by reading at this Meeting the papers sent by the Director, Labour Department, Mr. Reed proposed and Mr. Kent seconded, 'That the Secretary, U. P. A. S. I., be requested to send copies of the schemes to the Secretary of this Association for circulation amongst members so as to enable them to consider the subjects more fully.' This was carried.

South Indian Planters' Benevolent Fund.—The Secretary explained that at present some members paid their subscriptions direct to the Secretary, U.P.A.S.I., some to himself, and many not at all. He asked, therefore, for permission to add at the foot of subscription demands a demand for subscription to this Fund; as he was certain that more members would pay if they had only to add Rs. 10 to the subscription amount. This was agreed to.

Defaulters.—The Secretary was instructed to write off the arrears due on account of Attiegoonda, Sampigaykhan and Sankasali Estates. With regard to the arrears due of Coffee Cess for 1924-25 the Secretary was instructed to take the necessary steps to collect them.

Empire Planters' Club.—Read letter, dated March 10, from Mr. K. G. MacKenzie: the Secretary was instructed what reply to make.

Stephanodores Hampei.—A paper from the Secretary, U.P.A.S.I., dated March 14, was read to the Meeting. The question was fully discussed and the following resolution put from the Chair:—

'That, owing to the fear of Stephanodores Hampei, the Secretary, U.P.A.S.I., be requested to protest strongly against the import into India of all raw coffee with the exception of coffee of Indian origin shipped from port to port in India.'

Carried unanimously.

Letter from the Secretary, the Madras Agricultural Students' Union.—The Secretary was instructed what to reply.

Election of Office Bearers for 1926-27.—

Chairman. Mr. C. Lake was elected.

Executive Committee.—Member for South Mysore: (Mr. Percy Hunt having resigned on proceeding to England), Mr. St. John Hunt.

Member for North Mysore. (Mr. Poyser having resigned on leaving Mysore), Mr. W. H. Reed.

Member for Bababudins. (Mr. Godfrey having resigned on proceeding England), Mr. S. H. Dennis.

Member-in-waiting for South Mysore: Major A. L. Hill.

„ „ *North Mysore:* E. W. Fowke.

„ „ *Bababudin:* A. C. W. Denne.

Election of U.P.A.S.I. Representatives for 1926-27.—This was deferred to the next Meeting.

Election of Representatives on the Control Committees of the Mangalore and Mysore Divisions.—

Mangalore Division. Mr. W. H. Reed was elected as Active Member. Owing to the small attendance no one could be found to act as member-in-waiting. This election was deferred, therefore, to the next Meeting.

Mysore Division. No member present would consent to be elected. This was deferred, therefore, to the next Meeting.

Election of Member on the Board of Agriculture.—Mr. Sheshaiya was elected.

Roll of Honour.—A letter from the Secretary, U.P.A.S.I., was read to the Meeting. The Secretary was instructed to reply that this Association is in agreement with the Executive Committee on points 1, 2, 3, and 4 but that as regards 5 this Association thinks that it would be more suitable that the names of those killed be recorded in gold. The Secretary was instructed to circulate the list to all members of the Association, so as to enable every one to make any necessary amendments regarding the accuracy of the list.

Date of Next Meeting.—This was fixed for July 8.

Mr. Dennis proposed a vote of thanks to the retiring Chairman. With a vote of thanks to the President and Members of the Kadur Club for kindly allowing the Association the use of the Club; the Meeting ended.

M. A. DE WECK,
Secretary.

E. W. FOWKE,
Chairman.

LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness
Guaranteed.

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending June 5, 1926

Bank Selling Demand Draft on London

31st	1st	2nd	3rd	4th	5th
17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	Holiday.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending May 1, 1926	January 1 to May 1, 1926	January 1 to May 1, 1925
				s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING MAY 1, 1926)			N. India.	1 7·97	1 9·20	1 6·37
(a) Anamalais—			S. India	**1 10·05	††1 9·75	††1 6·36
Karakundru ...	49	1 11½	Ceylon...	1 10·28	1 10·49	1 8·18
Thayamudi ...	156	1 10	Java ...	1 4·85	1 5·53	1 1·06
Mukkottumudi ...	199	1 9¾	Sumatra.	Nil.	1 7·80	1 4·28
(b) Kanan Devans—			Nyassa-land.	1 6·24	1 6·79	1 3·35
Perriavurrai ...	242	1 10¾	Total ...	*1 8·24	†1 9·26	†1 6·35
Yellapatti ...	122	1 10½	(B) COFFEE			
Letchmi ...	226	1 9¾	SPECIAL CABLE, LONDON, JUNE 9, 1926			
Guderalé ...	93	1 9¾	'A' QUALITY 149 s. MARKET FIRM			
(c) Niligiri-Wynaad—			London Prices (seven days ending May 18, 1926)			
Daverashola ...	210	1 9¾	(a) Coorg—	bgs.	s. d.	Grades.
			Chisholm's	172	134 0	1,2,3, 'P B' & 'T.'
			Corringa-betta ...			
			(b) Mysore—			
			Santaveri ...	68	154 10	Do.
			D. Bababoodan ...	32	145 2	Do.
			Cannon C. M.	106	141 8	Do.
			Do.	91	140 1	Do.
			Mysore X. Q.	151	139 0	Do.
			(c) Niligiri-Wynaad—			
			Glenvans ...	51	133 7	1,2,3, 'P, B.' & 'T.' but also includes 22 bags 'Extra' which sold at 145s. 6d.
			(C) RUBBER			
			The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, June 8, 1926, was 20¼d.			

** Based on 1,519 packages.

†† " " 59,831 "

‡‡ " " 59,091 "

* Based on 75,443 packages.

† " " 1,175,358 "

‡ " " 838,671 "

(b) *Précis of Reports on the London Market received on Monday, June 7, and covering the seven days ending Tuesday, May 18 :—*

(1) *Tea.*—Monday the 17th ulto. saw a resumption of the auctions which had been in abeyance since the beginning of the month on account of the General Strike. We hope, therefore, to be able to publish next week the average prices realized at the sales during the week ending 22nd ulto., and in the mean time can say that, when the market reopened on the 17th idem, the demand for all kinds was very active and prices in many cases showed an advance of from $\frac{1}{2}d.$ to $\frac{3}{4}d.$ on those which were realized at the end of the previous month.

(2) *Rubber.*—The Port of London did not issue their usual Rubber Stock Statement during the week under review; but unofficially the quantity in the warehouses is given as 19,226 tons which is an increase of 1,016 tons on the figure for April 24, 1926. The quotation both for 'spot' and for 'Forwards' up to the end of the current year was $22\frac{1}{2}d.$ on May 19; but there was a premium on contracts for delivery during 1927-28.

(3) *Coffee.*—Auctions were resumed on May 18, after having been in abeyance from the beginning of the month owing to the general strike. Demand was active especially for Kenyan; but, as indicated on the previous page, some of the East Indians also sold quite well. On the 15th ulto., stocks in London of African, Indian, and other kinds, respectively were given as 45,781; 20,561; and 128,346; as compared with 39,091; 29,841; and 129,692 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, May 30, 1926, to Saturday, June 5, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	0.41	15.83	16.24	19. Coonoor ...	...	3.84	3.84
2. Kalthuritty.	0.82	15.88	16.70	20. Kotagiri ...	...	5.34	5.34
3. Tenmalai ...	0.09	14.36	14.45	21. Ootacamund	...	10.61	10.61
4. Mundakayam.	N.R.	17.18	N.R.	22. Yercaud ...	0.80	6.16	6.96
5. Peermade...	0.44	13.91	14.35	23. Devala ...	...	3.27	3.27
6. Twyford ...	0.69	14.71	15.40	24. Gudalur ...	...	2.80	2.80
7. V'periyar...	0.03	6.42	6.45	25. CALICUT ...	...	6.72	6.72
8. Kalaar ...	0.40	10.54	10.94	26. Kuttiyadi ...	0.88	6.28	7.16
9. Chittuvurrai	1.52	9.26	10.78	27. Vayittiri ...	...	4.56	4.56
10. BODI'KANUR	0.06	3.22	3.28	28. Manantoddi.	...	3.48	3.48
11. COCHIN ...	1.75	12.72	14.47	29. Billigiris ...	0.33	5.85	6.18
12. Mooply Valley.	0.04	10.21	10.25	30. Sidapur ...	...	9.60	9.60
13. Pachaimalai	...	9.33	9.33	31. Pollibetta...	...	5.46	5.46
14. Mudis ...	0.23	13.29	13.52	32. Somwarpett	...	1.77	1.77
15. POLLACHIE.	...	4.52	4.52	33. Ballupete ...	...	1.95	1.95
16. Manjeri ...	...	6.82	6.82	34. MANGALORE.	1.28	1.21	2.49
17. Nilambur...	...	N.R.	N.R.	35. MADRAS ...	...	0.20	0.20
18. Naduvattam	...	3.24	3.24				

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, No. 25] SAT., JUNE 19, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	399	East African Coffee ...	407
The Rubber Restriction Scheme ...	401	Letter to the Editor—	
District Association Meetings—		Coffee Queries ...	408
Nelliampathy P. A. ...	402	A Talk on Coffee ...	409
Shevaroy P. A. ...	403	Commercial and Meteorologi-	
U.P.A.S.C. Notice ...	406	cal ...	415

EDITORIAL NOTES

Reuters announce that Baron Stevenson of Holmbury (Cr. 1924) died last week at the early age of 53. He became a figure of national importance shortly after the outbreak of Great War; and at the Ministry of Munitions held successively, and of course most successfully, the posts of Director of Area Organization (1915-17); Vice-Chairman of the Advisory Committee (1917); and member of the Munition Council for Ordnance (1918). Sir James, as he then was, was also Surveyor-General of Supply at the War Office (1919-21). He became a member of both the Army and the Air Councils in 1919; and, at the cessation of hostilities, was appointed Chairman of the Committee of Demobilization and Reconstruction. Subsequently, of course, he added further to his laurels: in the eyes of Rubber Planters by his work as Personal Commercial Adviser to the Colonial Secretary and Chairman of the Rubber Investigation Committee, in which capacity he drew up the Rubber Restriction Scheme; and in the eyes of the world at large by his work as 'O. C. Organization' at the Wembley Exhibition of 1923 and 1924. He leaves no heir to the Peerage, or to the Baronetcy conferred on him in 1917; but his memory will be kept alive by the prodigious work he accomplished during the last ten years of his life.

Intimation has been received from the Scientific Department of the Indian Tea Association that three courses of instruction are to be held at Tocklai during the weeks commencing on Monday November, 29th and December 6th and 13th 1926. The courses comprise 60 seats (20 each week) and 2 of these have been allotted to the U.P.A.S.I. Applications for one of the two available seats should, therefore, be addressed at once to the Secretary, U.P.A.S.I., Post Box 155, Madras. Applicants must state definitely whether they desire to take the second course which commences on 6th December and is reserved for 'seniors only,' or whether they prefer one of the other two. We presume that accommodation will be available and messing provided in the Jorhat Club as in 1925, but that visitors are expected to bring their own personal servants and provide their own bed linen and mosquito nets.

Mr. J. Mitchell, the Organizing Secretary of the Rubber Research Scheme, warns Rubber Planters, in a letter to *The Times of Ceylon*, that they should be careful to see that all apparatus used in connection with spraying by Bordeaux mixture is kept away from factories and coagulating sheds, because even a very small addition of Bordeaux mixture to latex causes the resultant rubber to become sticky and tacky. He goes on to say that there is little, if any, fear of contamination when the sprayed trees are tapped; provided of course that no tapping is done on the day when spraying operations are being carried out.

The 1925 Administrative Report of the Commissioner of Labour, Madras, shows that the number of unskilled labourers recruited for Malaya and Ceylon during 1925 were respectively 78,174 and 76,410. According to the report, all the emigrants to Malaya proceeded to estates, whereas 2,831 of those who went to Ceylon were absorbed by Commerce and Industry and other non-agricultural work. The Government's Order, however, in commenting on the extraordinary increase in the Malayan figure (which in 1923 and 1924 respectively was only 35,827 and 48,188) states that recruitment was stimulated by the demand for labour in the Singapore dockyards; but, unless that labour is exclusively local, the Order seems to refute the Report proper which says that all the emigrants were for Estates.

The Straits Settlements' Government has appointed a Committee consisting of the Honourable the Commissioner of Lands (Chairman), the Secretary for Agriculture, the Conservator of Forests, the Honourable Mr. J. W. Campbell and the Honourable Mr. Tan Cheng Lock to (1) consider methods of encouraging the replanting of areas of rubber on which the trees have lost their productivity, and the advisability of alienating Crown Land on Special terms to replace such areas; and (2) report if any action by the Government is necessary or desirable.

The Annual Trade Report of the Commissioner of Customs for Kenya and Uganda states that 276,544 cwts. of Raw Coffee valued at £1,427,902; and 17 cwts. of Prepared Coffee valued at £121 were exported from the two Protectorates during 1925. Imports from Tanganyika for Home Consumption amounted to 110,848 cwts. valued at £509,787. The Imports of Tea amounted to 7,789 cwts. valued at £78,575; while the Exports were 1,101 cwts. valued at £10,956. 799,200 lbs. of Plantation Rubber valued at £68,276 were exported during the year.

Cricket, now regarded as Great Britain's national game and one that is held in high favour in many parts of the world, was—says *The Pioneer*—once actually under a ban. It was made illegal in England under a statute of Edward IV because its popularity interfered with archery. It remained under the royal ban until 1748, but there were still those who could not withstand its spell. There were heavy penalties attaching to the game. Those who allowed cricket to be played on their land were liable to a fine of £20 and three years' imprisonment; while each player could be fined £10 and given two years' imprisonment. Moreover, the 'implements' had to be burnt. Another curious fact concerning cricket is that the first international game should have been with America. This was in 1859 when George Parr captained the side. In 1861 A. J. Stevenson took a side to Australia, and a team of Aborigines visited England in 1868. The first Australian eleven did not visit England until ten years later.

THE RUBBER RESTRICTION SCHEME

Since we last wrote in our issue of May 8th on the Stevenson Restriction Scheme—the death of whose chief Promoter it is our painful duty to record elsewhere this week—some fresh light on the situation, as it is likely to develop in the immediate future, has come to hand.

Firstly, we learn that the average price of rubber during May was 22·52*d.*; which seems to point to the possibility if not the probability, of a May-July average below the pivotal point of 21*d.*, and consequently to a reduction next quarter from 100 per cent to 80 per cent of 'Standard' in the quantity permissible for shipment at the minimum duty rate.

Secondly, we find that neither Malaya nor Ceylon are shipping anything like the full Standard Production which they are now allowed to export. Mr. G. F. R. Browning, the Ceylon Rubber Controller, has informed a representative of *The Times of Ceylon* that at the end of May, owing to the accumulation of coupons carried over, the actual exports were less than the permissible exports by no less than 11,000 tons, and the similar figure for Malaya is estimated to be at least 20,000 tons.

It would thus appear that Malaya and Ceylon between them at present hold coupons for the export of 31,000 tons over and above the certificates for full Standard Production which they will receive for June and July. There seems little likelihood of full Standard Production being exported during either of these two months; so that, in all probability, there will be coupons on hand for considerably more than the above mentioned 31,000 tons when the new quarter commences on August 1st. Taking full Standard Production in Malaya and Ceylon respectively to be about 27,000 and 6,000 tons or 33,000 tons in all; it is obvious that a reduction in permissible exports to 80 per cent 'Standard' during the August-October quarter would mean a reduction of the quantity for which the Rubber Controllers in those countries could issue coupons by some $6,600 \times 3$ or say 20,000 tons; and that this reduction would be purely theoretical because in practice—owing to the above mentioned 31,000 tons 'carry over'—the permissible exports could (despite the 'paper' 20 per cent reduction) exceed those of the previous quarter by over 11,000 tons. We understand that the Ceylon and Malayan Rubber Controllers are in communication regarding what, if any, action should be taken to render the 20 per cent reduction contemplated by the Colonial Office Advisory Committee one that could be made really effective if the present sagging prices do not receive a timely stimulus in the shape of a resuscitation of the rather inactive American demand; and it has been suggested that, as an outcome of their deliberations, the validity of export certificates may just possibly be limited to a period of three months.

In this connection, however, we adduce a point which we have not seen raised elsewhere. If exports have been approximately equal to Production; the 31,000 tons 'carry over' which is apparently perturbing the Rubber Controllers is only a 'paper' one, and merely comprises permission to export stocks which do not exist!

If, on the other hand, Production is greatly in excess of Exports—as presumably the Rubber Controllers strongly suspect, and indeed may definitely know—; the accumulated stocks in the East at the end of the current restriction quarter may not improbably considerably exceed the stocks in London itself. We do not feel, however, that the eventualization

of such a contingency should cause undue alarm; for as Messrs. Sanderson & Co. recently put it 'It seems in the present circumstances quite a sound policy to hold up a certain portion of the crop, and not to attempt to force off the surplus on an unwilling market.' World Demand cannot always be expected to synchronize exactly with World Production; during the first quarter of the year rubber has been in sufficiency and the inclemency of the American weather probably reduced consumption there by at least 10,000 tons; but it is a long lane that has no turning, there is every indication that the American factories will soon be again working at full pressure, and there is a satisfactorily increasing demand from the Continent for all grades.

DISTRICT ASSOCIATION MEETINGS

A. NELLIAMPATHY PLANTERS' ASSOCIATION

Proceedings of an extraordinary General Meeting of the Nelliampathy Planters' Association, held at the Seetagundy Bungalow on June 13, 1926, at 2 30 p.m.

Present

Messrs. H. D. Chaldecott (*Chairman*), H. A. Boas, J. W. Stevenage and A. P. Kinloch (*Honorary Secretary*) and by proxy Messrs. H. M. Hall, A. Hall and A. C. White.

The Honorary Secretary read the notice calling the meeting.

The Minutes of the last General Meeting held at Cotengady Bungalow on May 9, 1926, were taken as read and confirmed.

1. Proposed from the Chair that a vote of thanks be accorded to the Anaimalai Planters' Association in reply to their letter of the 4th instant in allowing the hitherto subscribing estates of the Nelliampathies to secede from their Association.

Carried.

2. Proposed from the Chair and seconded by Mr. Stevenage that Messrs. A.P. Kinloch and A. Hall be appointed as members of the U.P.A.S.I. General Committee.

Carried.

3. The Honorary Secretary brought up the question of the Planters' Benevolent Fund and all members present agreed to join.

4. Proposed by Mr. Stevenage and seconded by the Chairman that Messrs. A. P. Kinloch and A. Hall be appointed as delegates to the Annual General Meeting of the U.P.A.S.I. in August.

Carried.

5. Proposed by Mr. Kinloch and seconded by Mr. Stevenage that the Honorary Secretary be instructed to thank the President of the Palghat Taluq Board for his recent visit and his assurance that he will back this Association in their endeavour to get the Kollengode-Nenmani-Seetagundy Road metalled and that he would recommend the Government to sanction a grant to the Anglo-American Direct Tea Trading Co., Limited, for their hospital and school.

Carried.

Proposed from the Chair a hearty vote of thanks to Mr. Kinloch for the use of his bungalow.

A. P. KINLOCH,
Honorary Secretary.

H. D. CHALDECOTT,
Chairman.

B. SHEVAROY PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Annual General Meeting held at the Victoria Rooms, Yercaud,
on Thursday, May 27, 1926, at 2 p.m.

Present.

Capt. E. H. A. Travers Drapes (*Chairman*), Mrs. V. A. Lechler, Rev. Father Capelle, Messrs. W. I. A. Lechler, J. Singaram, C. Rahm, E. H. Gilbey, B. A. R. Kandaswamy Chettiar, E. L. Poyser and W. A. Rahm (*Honorary Secretary*).

AGENDA

1. The notice calling the Meeting was read.

2. **Committee's Report for the year ending March 31, 1926**

Meetings.—The following meetings were held during the year. General Meetings 7. Average attendance, 14.6. Committee Meetings 7. Average attendance, 6.6. Standing Labour Committee Meetings 9.

Acreage.—This Association started the year with 3,286 acres; and, as a result of the Special Appeal that was sent out, 8 more estates joined the Association with 1,000 acres. The coming year starts with 4,205 acres of coffee and 170 acres of Rubber, making a total of 4,375 acres. There are still about 2,000 acres of Coffee and Rubber cultivation on the Shevaroy's that are out of the Association, and the Committee hope that the coming year will see a still further increase in the acreage of the Association, and trust that members will do all in their power to persuade those to join that are standing out.

Subscriptions.—The subscription during the year was Re. 1 per acre of which 12 annas went to the Upasi and 4 annas to the S. P. A. Subscriptions have been collected in full except the arrears due by Tipperary Estate.

The Scientific Cess was called for and collected and paid except for Rs. 18-4-0.

Personal members' subscriptions amounted to Rs. 30.

Budget.—The Budget for 1926-27 has been sent to all Members and you will be asked to pass the same to-day. From the Budget it will be observed that the writer's salary has been increased by Rs. 15 and now stands at Rs. 40 per mensem. The Committee wish to bring to your notice that, since the introduction of Registration of Coolies, the S. P. A. Writer's post is a full-time one; and in view of the good work that has been put in by him in maintaining the Registers, the Committee recommend that the increase of salary as budgeted may be adopted.

Accounts.—The accounts duly audited have been placed on the table, and the Balance Sheet has been sent to all members. The expenditure for the year amounted to Rs. 1,012-5-0; and exceeded the Revenue by Re. 1-2-3, in spite of the increased acreage during the second half of the year. This is due to the increased Office expenditure for the printing of the Certificate of Employment Forms and Pro-Note Forms, and also to the writing off of Rs. 13. The Assets of the Association stand at Rs. 1,520-5-0, and the Liabilities at Rs. 554-8-0.

Correspondence.—447 letters and 1,386 Circulars and Notices were sent out during the year.

Standing Labour Committee.—In accordance with the Resolutions passed on October 22, the Standing Labour Committee drafted Rules for the Limitation of Advances, and also a scheme for the Registration of Coolies which came into force on January 7, 1926. The Rules as amend-

ed have been accepted by all members of the Association, and have been working satisfactorily.

2,940 coolies have been registered up to March 31. The Committee hope that members will continue to show the same spirit of co-operation in the future as has been evidenced since the Rules were passed.

Our thanks are due to the Standing Labour Committee for the trouble they have taken and the many meetings they attended before the Rules were an accomplished fact ; and also to the members for the patience and good will with which they have shouldered the extra burdens that have been put on them.

Labour Laws.—We start the year for the first time without a Workman's Breach of Contract Act. Government have, after representations from the Upasi, appointed a Committee, three members of which represent the Upasi, to consider the amendment of Act I of 1903. Your Chairman was appointed as Delegate from this Association to collaborate with the planting members on the Government Committee ; but so far it has not been necessary for him to attend.

Scientific Department.—The year has seen the closing of the old Sidapur Coffee Experimental Station, and the opening of the new Mysore Station. It is to be hoped that the next step will be the appointment of a special Coffee Expert to study scientific problems. This may mean an increased coffee cess ; but it will be money well spent, for there are many new pests and diseases of Coffee in danger of introduction, and we don't want to suffer as Ceylon, Java and Brazil have done for want of a little scientific advice. Our thanks are due to the Mysore Government for the very generous help they have given in founding the Coffee Experimental Station, and also to the Mysore Planters' Association for originating the scheme.

Sprayers.—With the help of the Mysore Agricultural Department, 33 Holder Sprayers were obtained for members of this Association ; and a further 44 Sprayers of the same pattern have been ordered from Germany.

Local Coffee Sales.—Coffee sales notices were again circulated, and proved a help in keeping members informed as to the latest prices obtained.

Bangalore Meeting.—This Association was represented by the Chairman and Honorary Secretary. This Association brought up the question of an extension of time for free wharfage at S. I. Railway stations ; and was supported by Nilgiri Planters' Association : unfortunately the matter is still pending.

This Association supported the resolution of the Coorg Planters' Association regarding the Stephanoderes pest of Coffee, and a strong representation was made to the Director of Agriculture to safeguard the Coffee industry in India by preventing the introduction of infected coffee from foreign countries.

Sports Club.—This Association is a member of the Sports Club. It is regrettable that we have only one Personal Member of the Club, and it is hoped that this Association will be able to be represented at the Planters' Meeting at Ootacamund next year.

Forest Leases.—Forest leases expire this year. We were told that Pattas might be given ; but we are now informed that Government do not agree to the change to Patta Lands, and we must wait till we know the terms of the new agreements with the Forest Department.

Roads.—It is to be deplored that the Roads on the Shevaroyas are in such a bad condition. With the advent of motor transport this Association should make every effort to have them improved, and it is up to the members of the Association to take up the contracts of the P. W. D. Roads

as far as possible, and to see that the full value is put into the improvement of the road instead of allowing contractors to make a handsome profit on the roads. Our thanks are due to the Union Board for the good start that has been made in metalling the Lake Road, and we hope to see a continuation of the excellent work each year.

Visitors.—This Association was visited by Mr. Fowke, the Chairman of the Upasi, and Mr. Waddington, the Secretary, in connection with the extension of Act I of 1903; and our views and difficulties were placed before them. This visit, though all too short, was very much appreciated; and we feel that our interests are in good hands.

Conclusion.—In concluding our Report, we desire to express our grateful thanks to all members for their confidence and support during the past difficult year; and your Chairman and Honorary Secretary desire to offer their personal appreciation of the help they have received from members of both Committees in overcoming the many problems and difficulties which arose during the year.

We now place our resignations in your hands.

E. H. A. Travers Drapes (*Chairman.*)

W. A. Rahm (*Honorary Secretary.*)

Rev. Father Capelle

Messrs. N. M. Hight

C. Rahm

B. A. R. Kandaswamy Chettiar

V. L. Travers Drapes

C. D. Ryle

} *Members of the Committee.*

Proposed by Mr. W. I. A. Lechler.

Seconded by Mr. E. H. Gilbey

'That the Report be adopted and that a hearty vote of thanks be accorded to the Chairman, Honorary Secretary and Committee (including the Labour Committee) for the excellent work they have put in during the year.'

Carried 'nem. con.'

3. *Accounts for year ending March 31, 1926*—The audited accounts and Balance Sheet were examined showing a credit balance of Rs. 769-13-0. 'Resolved that the Accounts and Balance Sheet be passed.'

Carried 'nem. con.'

4. *Budget for 1926-27.*—Proposed by Mr. B. A. R. Kandaswamy Chettiar and seconded by Mr. C. Rahm.

'That the Budget for 1926-27 be and is hereby adopted.'

Carried 'nem. con.'

5. (a) *Election of S. P. A. Office Bearers.*—The following Office Bearers were then elected by Ballot:—

Capt. E. H. A. Travers Drapes:—*Chairman.*

Mr. W. A. Rahm:—*Honorary Secretary.*

Rev. Fr. Capelle

Messrs. C. Rahm

B. A. R. Kandaswamy Chettiar

E. L. Poyser

W. I. A. Lechler

} *Members of Committee.*

(b) *Standing Labour Committee:—*

Mr. P. J. Watts.

Rev. Fr. Capelle.

Messrs. B. A. R. Kandaswamy Chettiar.

E. L. Poyser.

C. D. Ryle.

(c) *Election of U. P. A. S. I. General Committee :—*

Proposed by Mr. B. A. R. Kandaswamy Chettiar.

Seconded by Mr. E. L. Poyser.

‘That the Chairman and Honorary Secretary be elected Upasi General Committee Members.’

Carried.

6. *Election of an Auditor.*—Read letter from Mr. K. V. Gopalaiyer dated May 8. It was pointed out that the Association were not able at present to offer a higher remuneration.

Proposed by Mr. E. L. Poyser.

Seconded by Mr. B. A. R. Kandaswamy Chettiar.

‘That Mr. K. V. Gopalaiyer be appointed Auditor for the current year at the usual remuneration of twenty-five (25) rupees.’

Carried.

7. *Shevaroy Roads.*—With the consent of the meeting ; the subject of roads on the Shevaroy was brought up by the Honorary Secretary, and the following resolution passed :—

‘Resolved that, in view of the deplorable condition of the roads on the Shevaroy, this Association approach the Executive Engineer, P. W. D., with the object of the Shevaroy Planters' Association obtaining the contracts for repairs and maintenance of all P. W. D. roads on the Shevaroy except the Cart Ghat Road, if possible, for the current year at estimate rates.’

Carried unanimously.

With a vote of thanks to the Chair the meeting terminated.

W. A. RAHM,
Honorary Secretary.

E. H. A. TRAVERS DRAPES,
Chairman.

U. P. A. S. I. SPORTS CLUB

Bangalore Conference, August 1926

‘DEWAR GOLF CUP AND SPENCER'S PRIZE’

SPENCER'S PRIZE.—Messrs. Spencer & Co., Ltd., have again been good enough to offer (*per* The Manager, West End Hotel) two cues in case for an Inter District ‘Fleas’ Tournament to be played on the Hotel tables.

Past winners. 1924 Cup for billiards—Mr. Wilkins.

1925 ‘Fleas’ Inter District—S. Travancore (Messrs. Millar and Jodrell.)

DEWAR GOLF CHALLENGE CUP.—(handicap)—The kind permission of the members of the Bangalore Golf Club is as usual being asked for the use of their links.

Past Holders. 1924 Mr. A. C. Cotton.

1925 Mr. C. Newcome.

ENTRIES for both competitions should be sent in beforehand, although late entries will be accepted up to 1 p. m. at West End Hotel on Monday, August 23.

Entries for the ‘Fleas’ Tournament should be in pairs from districts and the U.P.A.S.I.

Entries for the ‘Dewar’ Golf Cup must be accompanied with the entrant's handicap stating the name of the Club, either in this Country or at Home, and the number of holes of the course.

WOODBRIAR ESTATE,
DEVARSHOLA, P. O.,
June 12, 1926.

G. W. FULCHER,
Honorary Secretary.

EAST AFRICAN COFFEE

Several varieties of coffee exist in East Africa, says a report which has been received by Department of Commerce, Washington, but the principal ones are *Coffia robusta*, *engenoides*, *excelsa*, *arabica*, and *liberica*. The *robusta* and *engenoides* are indigenous while the other three kinds are imported. Two have been found commercially desirable, the *robusta* and *arabica*, but the latter has proved the more valuable as it grows well in higher altitudes and possesses better liquoring qualities. All coffee exported from this region, however, is shipped as 'Kenya' or as 'Uganda', the 'Kenya' brands always commanding higher prices.

In 1920 there were 27,813 acres under coffee, and the rate of increase since that time has approximated 20 per cent each year over the immediately preceding year. Up to July, 1925, there were 65,460 acres under cultivation, classed as follows: Acreage of trees up to three years old, 30,394; trees three to six years old, 14,463 acres; over six years old, 20,603 acres. Experience has taught the coffee growers that the best spacing for trees is 10 by 10 feet, thus making 435 trees to the acre, or 28,275,000 for the entire country.

Some of the best coffee land will, under normal conditions, produce one ton of clean marketable beans an acre, and a half-ton an acre annually is quite common; but a large area of unsuitable land is planted to coffee, the production on which is so small that it brings the general average of the entire country to about 5 cwt. to the acre, or slightly more than one pound a tree.

The principal harvesting season is from September to January. During July, following the long rains, there is a fairly good picking season, but between these main seasons coffee in small quantities is continually maturing and furnishes what is termed 'fly' picking, which barely pays working expenses; but it is for the good of the trees that these small quantities of berries are not allowed to remain.

Coffee like other products of East Africa, is shipped as soon as harvested, since there are practically no storage facilities in the country. During the past years, Kenya has produced a very high-grade coffee due to favourable climatic conditions. The average price was about 27 cents a pound.

Thirty and a quarter million pounds of *arabica* coffee were exported from Mombasa during 1924. The principal countries of destination and their proportion of the exports were the United Kingdom with 59 per cent; Holland 8 per cent; Egypt 7 per cent; France 6 per cent; Union of South Africa 3.5 per cent; Red Sea Ports 6 per cent.

The coffee is put into a double container consisting of two gunny sacks, each weighing $2\frac{1}{2}$ pounds, and this container holds 187 pounds of coffee. It is shipped by rail to Mombasa from the curing factories, the proprietors of which act as shipping and commission agents for the grower. These agents will advance money up to 60 per cent of the current market value of the coffee, or negotiate with banks to make these loans. Every grower having 50 acres or more of coffee has his own private brand, and these brands are becoming so well known in London that the coffee is frequently bought simply on its reputation. It has been the custom, however, to advertise the sale of various coffees, and intending purchasers secure samples and have them tested for liquoring qualities which determine the bidding prices at the sale.

LETTER TO THE EDITOR

(The 'Planters' Chronicle' is not responsible for the opinion of its correspondents.)

Coffee Queries

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

With reference to the Coffee Queries¹ by Mr. S. L. Mathias, Merthi-Subbangudigy Estate, Balehonnur P. O., Kadur District, as published in the *Planters' Chronicle* of March 20, 1926, I beg to express an opinion based on forty years, experience of coffee; which I hope will be of some interest to my brother planters.

(1) Naturally virgin jungle is to be preferred to the old coffee estates for the cultivation of tea. But where to find such virgin jungle in large areas for tea? Almost all the virgin jungle in Mysore has been already opened for coffee. Consequently it is mostly coffee land that will have now to be taken up for tea. The prospects of the tea industry will however depend upon the right selection one makes with due regard to the important factors especially rain fall: say about 120 inches fairly distributed throughout the year. Tea as is well known is not a surface feeder like coffee but a very deep rooted plant; and, being naturally hardy, it cannot be easily killed. It will be remembered that Wynaad, Ceylon, and the Nilgiris, etc., had once coffee all over, and now its place has been taken by tea. These places are not now worse in tea than coffee. It is now time for Mysore to take to tea cultivation especially in areas where the rainfall is heavy. In my opinion such places ought to have been converted into tea gardens from the very outset. In other respects, I agree with Mr. Mathias' views.

(2) I would prefer to apply the manure, the chemical manure in particular, at the close of the heavy monsoons after raking up the mulch; and then repute it. The cost of raking up and reputeing the mulch will be fully compensated by the extra return that will be got by the manure coming immediately in contact with the feeding and hungry microbes ready on the surface of the soil. On the other hand, it is believed that the manure, especially the chemical manure, will lose much of its properties if it does not come into contact with the soil immediately it is applied.

(3) I have been trying with success the system of digging big pits and then filling them up with layers of either cattle manure, fish manure, or coffee pulp, followed by layers of top soil; and repeating the same process till the pit is fully filled up. The top of the pit is then covered with earth giving a downward slope to avoid rain water soaking in the pit. The manure thus stored is applied to the field after the heavy monsoons.

MANGALORE,
May 25, 1926.

Yours, etc.,
A. S. SALDANHA,
Proprietor of Navinkola and
Thanady Estates,
Javali P. O., Kadur.

¹ Mr. Mathias asked, (1) how virgin jungle compared with abandoned coffee land for tea planting, (2) whether it really paid to rake and repute the mulch before applying manure and (3) how manure could be most cheaply stored without suffering deterioration during the Monsoon. ED.

A TALK ABOUT COFFEE

BY

SIR FRANCIS WATTS, K.C.M.G., D.Sc.

A somewhat striking feature of the moment is the revival of the interest taken in the cultivation of Coffee in Trinidad ; this increased interest arises from the improvement in prices during recent years and the hope that this increase may be more or less permanent, at least sufficiently so to enable coffee to be profitably grown here.

In the former days a considerable amount of coffee was grown in the Colony, but of recent years and until quite lately, the amount produced hardly sufficed to meet the demands of home consumption, and there was practically none exported. In this connexion the following table showing the exports from the Colony are of interest :—

	lbs.	£		lbs.	£
1899	175,040	1,130	1922	329	17
1909	3,024	37	1923	1,715	57
1919	160,704	8,034	1924	518,076	15,873
1920	73,200	1,034	1925	593,302	28,202
1921	1,034	24			

There is no doubt that coffee grows well in Trinidad, it is a comparatively hardy plant which will grow at low elevations and also at elevations far exceeding anything found here ; while it grows well on level land, provided the drainage is good, it will grow also on steep hill sides if the soil there is such as will permit of good root penetration ; indeed, steep hill sides with moderately open stony soil furnish some of the best coffee lands.

The expansion of coffee growing in Trinidad is greatly facilitated by the fact that coffee can be planted around the cacao fields, and, to a certain extent, in the fields themselves where the cacao trees are rather widely separated from each other ; in this way a good deal of coffee can be planted and looked after at a low cost and much experience gained which will be of great service when the cultivation of coffee as a main crop comes to be considered.

The market price of coffee has fluctuated greatly and it was the low price prevailing about the period from 1896 to 1910 which had much to do with the local loss of interest in this crop. The market price of coffee entering the United States during recent years has been approximately as follows :—

		s.	d.
1881-85	9.7 cents per pound =	44	4 per cwt.
1886-90	12	54	10
1891-95	17	77	8
1896-00	9.2	42	1
1901-05	7	32	0
1906-10	7.8	35	6
1911-14	11.8	54	0

In more recent years the price of Santos coffee has ranged from about 60s. per cwt. at the close of 1923, steadily rising throughout 1924, reaching about 110s. at the close of the year, then falling during 1925 until at the end of that year the value was about 90s. to 95s..

While these figures are only very approximate ones they will serve to show the general trend of prices. When prices were around 6 or 7 cents a pound, or 28s. to 30s. a cwt. there was no inducement to grow coffee here ; and it was being produced in other countries, such as Brazil, at a loss, while the situation was further complicated by the enormous over-production then taking place in that country. It is probable that this over-production has lessened or even ceased and that the less suitable and less productive lands in Brazil will no longer be planted in coffee but in other crops ; the interest taken in cotton, coupled with the great demand and high prices, is likely to have a bearing on the situation and may tend towards the stabilization of prices ; furthermore, the prevalence of pest and diseases, notably of the coffee berry borer, *Stephanoderes coffeae*, is affecting the production of coffee there.

The world's trade in coffee is an enormous one : in round figures the quantity produced is in the neighbourhood of 17,000,000 bags of 132½ lb. or approximately one million tons.

Brazil is the country producing by far the largest quantity of coffee in the world, the output averaging about 1,470,000,000 lb. or about 656,200 tons. The following are some of the principal coffee-growing countries with their approximate annual output based on the figures for five recent years.

	lbs.		lbs.
Columbia	... 172,862,000	Dutch East Indies.	103,701,000
Venezuela	... 110,175,000	Arabia	... 10,838,000
Salvador	... 78,935,000	British India	... 23,768,000
Costa Rica	... 23,244,000	Abyssinia	... 12,744,000
Guatemala	... 88,213,000	Angola	... 10,460,000
Haiti ...	... 58,309,000	Hawaii	... 4,245,000
Porto Rico	... 30,034,000		

to mention only a few. It is evident, therefore, that such coffee as Trinidad is likely to produce will have no effect on the world's market.

There are many varieties of coffee and local growers will have to exercise their judgment as to the kind they intend to grow. Commercial coffees are classed under three main groups, Arabian, Liberian and Robustoid.

By far the greater part of the world's supply is derived from coffees of the Arabian class, this being the kind of coffee principally grown in Brazil and in Central and South America generally.

Arabian coffee, derived from *Coffea arabica*, is the original commercial coffee of the East, whence, it was introduced into the West Indies and South America. It seems probable that this coffee was first introduced into the western world by way of Martinique, whence it was carried to the larger Islands to the north and by way of the Guianas found its way to Brazil, Venezuela and South America generally.

Arabian coffee constitutes the type of highest quality and best flavour. There are many sub-varieties recognized, some of which are known on the market under the name of the country or district from which they come, such as Arabian, Javan, Santos, Rio, with a host of other names indicating places of origin, together with such names as Bourban, Erecta, Maragogipe, San Ramon and others.

The principal coffees of the Robusta group are Robusta and Canephora, together with various sub-species not immediately interesting to us. The coffees of this group do not as a rule possess the fine flavour of Arabian coffee, but they are cultivated in many places on account of their larger yields and their greater hardiness. They thrive well at low elevations.

To the Liberian group belong Liberian and Excelsa; Liberian coffee has not the fine flavour of Arabian and is not so readily marketed; the plant is, however, a very hardy one and has from time to time attracted a good deal of attention. In the present circumstances it does not appear desirable to suggest its extensive cultivation here. The form known as Excelsa which was discovered in West Africa in 1905, has features to commend it; it is a hardy, highly productive form and the flavour is stated to be good; the bean is smaller than that of Robusta, being in size very like Mocha, it is lighter in colour than Liberian.

In deciding which variety of coffee to cultivate advantage will naturally be taken of the experience now being gained with respect to the several leading kinds now being planted on a moderate scale in various parts of the Island. A very useful purpose will be served if coffee-growers will carefully collect all the information they can about the several kinds of coffee they are growing and bring this forward for general consideration and discussion. In this the Agricultural Department can render useful help, particularly by collating and publishing such results as can be collected. In this way much time will be saved in arriving at sound conclusions.

It would seem that several points have to be taken into consideration in selecting the type to be planted locally. Arabian coffee possesses the finest flavour and is the kind of coffee most readily sold; so from the marketing point of view this has preference. On the other hand it is said to be less hardy than some other kinds and more liable to the attacks of pests and diseases, furthermore, it gives lighter yields and it has the disadvantage that it sheds its berries when ripe, so that picking has to be carried out at shorter intervals and be more carefully conducted. Except that they are liable to be lost, it does not do the berries any harm to be upon the ground for a day or two.

Excelsa and Robusta coffee, on the other hand, are heavy bearers and do not shed their berries when ripe, they are thus more easily picked, and at considerably less cost, besides, these varieties are believed to be hardier and more resistant to attacks of pests and diseases. It is worthy of note that other varieties, notably Robusta, have been largely substituted for Arabian in Java in recent years and it will be well to watch the progress of events in that country. So far as I can see, the planter will have to gain his own experience and from it decide for himself what type of coffee he will plant when planting takes place on a larger scale, as it seems likely to do at no distant date. Something will, no doubt, depend on the market to which Trinidad coffee will principally go and in this connexion it may be worth while noting that coffees of the Robusta and Liberian types are not so favourably regarded in the United States markets and it is significant that Robusta coffees are not accepted for delivery in respect of Exchange contracts on the New York Coffee and Sugar Exchange, though they are saleable on the open market. I understand that coffees other than Arabian are saleable on their merits in England and in European markets.

The best qualities of Arabian coffee are produced at high elevations, such as those ranging from 3,600 to 6,000 feet ; this is beyond anything attainable in Trinidad, but still it is probable that Arabian coffee would be suitable for planting at the higher elevations here, while Excelsa and Robusta would be suitable for the lowlands. A variety of Arabian known as San Ramon, which is stated to be hardy and capable of standing rather more exposure than ordinary Arabian, is being tried here in at least one instance and is being grown at the Experiment Station ; this variety is probably worth attention.

Speaking generally, coffee requires shade, this will be a matter for consideration when coffee is grown as a main crop and not interspersed with cacao, as is so largely the case at present. No doubt the facility with which coffee can be grown along with cacao to a large extent accounts for the rise in production now taking place, for in this way a good deal of cultivation can be introduced in an inexpensive and unobtrusive manner ; but now coffee planting for its own sake is beginning to have serious consideration.

The general methods of cultivation present little difficulty to those accustomed to handle tropical crops ; proper weeding and tilling are necessary and manuring must have attention, for good crops cannot be continuously obtained from poor unmanured land. Reasonable manuring from the start is desirable ; it is poor policy to exhaust the soil and then endeavour to restore fertility by drastic attempts to redress the evil. As with other crops, farmyard manure should be used wherever it can be obtained and mulching is also valuable : when artificial fertilizers are used they should contain nitrogen, potash and phosphates, for there is no information available at present to lead one to suppose that one or other of these constituents can be dispensed with.

One feature should have attention from the outset. The trees should be topped and pruned ; left to themselves they will grow to considerable height, 20 feet or more and it is difficult to gather the crop from these overgrown trees ; ladders are necessary and the trees are liable to be broken and damaged ; besides, the lower branches of overgrown trees do not produce any considerable crop, so it is better in everyway to keep the trees to a height of about six feet and to maintain them so by regular pruning ; they will throw out laterals, which themselves may need pruning, which will be thickly covered with fruit that can be easily picked. The neglect of topping and pruning is a defect very commonly noticed in the Island and it is one which should be remedied if the industry is to be put on a sound basis.

There is one point which does not appear to have been discussed but which may assume some degree of importance in the near future. If the extension of coffee growing is accompanied by the planting of a number of different varieties it is conceivable that the quality of the resulting berries and commercial coffee may be affected by cross pollination between different varieties. I have no information as to the manner in which pollination takes place, but, seeing that the plant has a conspicuous and strongly scented flower one would expect that insects play some part in this and possibly insects which are active in the evening or at night. It would be of considerable interest and service if coffee growers were to make observa-

tions concerning the insects which visit coffee flowers and the hours at which these visits take place. It is possible that the flowers are to some extent self pollinated. If there is extensive cross pollination this will interfere with the attempts to produce particular types of coffee in circumstances where several varieties are being grown in the same neighbourhood and this may also lead, as it has done in the case of other crops, to the idea that the crop is deteriorating on account of unsuitable conditions of soil or of cultivation. This matter should have attention at the outset. It is of importance too in connexion with the question of seed supply ; if there is danger of cross-pollination it is hopeless to attempt to establish pure types in the midst of mixed cultivations ; trees grown from seed so produced will be irregular in type and uniformity of crop will be difficult to secure.

Seeing that much of the coffee produced in Trinidad will be grown at low elevations it is improbable that the general output of the Island will rank as of very high grade, but notwithstanding this much may be gained by paying strict attention to various points affecting quality.

As far as possible the different varieties should be kept apart, Arabian kinds should not be mixed with Robusta or Excelsa, nor should they be mixed with each other. These different varieties have different qualities and flavours and it will not be possible for a coffee taster to classify a sample properly if it consists of a mixture of types ; furthermore, it will not be possible to secure the uniformity of a mark and to establish a reputation for it if it is mixed and consequently inconstant in character. This is a matter which should have immediate attention at the hands of producers, dealers and shippers, every effort should be made to keep the different kinds, such as Arabian, Robusta, Excelsa and others strictly apart ; unless this is done there is little prospect of Trinidad coffee gaining a good name on the market ; if it is mixed in character it will only be used for preparing low-grade coffee and will bring low-grade prices. I think this is a matter of importance at this stage of the revival of the coffee industry. If Trinidad becomes recognized on the world's markets as turning out well prepared and uniform lots of coffee, sound, clean and well graded, a reputation may be established and the Island may secure a recognized place in the market and obtain good prices ; but if the output of the island is mixed in type and badly prepared, ungraded, lacking in uniformity and dirty it will be stigmatized as inferior and command only low prices.

This question of the proper grading of Trinidad coffee I believe to be of fundamental importance to the success of the industry. With the establishment of large plantations it will be possible for the owners to prepare their coffee carefully and to establish a reputation for regular and reliable marks, but at this stage of development the coffee is being grown in small quantities on scattered areas ; if it is sent to market without proper cleaning and grading it is unlikely that a good, or even a passable reputation will be gained and consequently prices will be lower than they otherwise would be. The position may be safeguarded if coffee growers will take steps to look after their own interests ; there should be little difficulty in putting matters on a sound basis from the start.

In the absence of large plantations possessed of machinery for preparing coffee for market it would be well if all coffee were sent to central depots properly equipped with the necessary machinery for preparing coffee

for market: these depots might buy the coffee of small growers outright, subsequently cleaning and grading it for sale, or they might offer the alternative of buying outright or of cleaning and grading it for the owner for a specified charge, returning the produce to him to sell as he thinks best. If all the coffee produced in the island were to pass through properly equipped depots of this kind, and if the grades prepared by this depots were kept separate and not mixed prior to shipment, it should follow that the coffee shipped from Trinidad would be clean, properly graded and unmixed in type and in this way a good reputation would be established. I understand that there are depots of this kind already established in the colony; it will be a good thing if they are properly made use of.

It occurs to me that it would be to the advantage of the coffee industry of the colony if it were compulsory for all coffee for shipment to have passed through a proper cleaning and grading depot. I do not propose to-day to take up time in discussing how such a proposal might be given effect to, but I do not think that the matter presents any serious difficulty.

I make no attempt to-day to deal with the question of the pests and diseases of coffee; these matters can be far better dealt with by the officers of the Agricultural Department and I think it will serve a useful purpose if the officers of this Department are invited to give addresses on the subject before the Agricultural Society, in this way planters would be placed in possession of carefully considered information, which, being printed and circulated, they would be able to consult at leisure. Suffice it to say that coffee is subject to a considerable number of insect pests and fungus disease, the control of which is of fundamental importance to the industry. It is a matter of common knowledge that the coffee industry of Ceylon was entirely destroyed in the seventies of the last century because means could not be found for controlling the coffee leaf rust caused by the fungus *Hemileia vastatrix*. It may be well, however, to direct attention to the American leaf disease, caused by the fungus *Stibella flavida*, which occurs in Trinidad to a small extent, more particularly in situations which are unduly moist; and also to the Sclerotium disease, caused by the fungus *Sclerotium coffeicolum*; this disease attacks Liberian and Excelsa coffees as well as Arabian; the point of importance in this connexion is, that the disease which formerly appeared to be confined to Surinam has recently been found in Trinidad.

Among insect Pests I may refer to the coffee berry borer, a small beetle, *Stephanoderes coffea*, the larva of which bores into the cherry and into the seed, or berry itself. This beetle is doing much damage in Brazil where its depredations are causing considerable alarm and are attracting much attention: as this beetle occurs in Surinam and may be present in Venezuela it will be well to take all possible precautions to prevent its introduction into Trinidad: at the same time coffee growers should keep a very sharp look out for this pest and should report immediately to the Agricultural Department any appearance leading them to suspect the presence of this beetle here.

Mention may be made of various scale insects inimical to coffee and to the leaf miner, *Cemistomum coffeellum*, Departmental advice concerning which should be sought should they become unduly numerous.

(To be concluded next week)

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending June 12, 1926

Bank Selling Demand Draft on London

7th	8th	9th	10th	11th	12th
17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.

II. Summary of latest Market Reports and Prices to hand:—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending May 22, 1926	January 1 to May 22, 1926	January 1 to May 22, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING MAY 22, 1926)			N. India.	1 8.05	1 9.14	1 5.90
			S. India	**1 9.16	††1 9.69	††1 6.41
			Ceylon...	1 10.01	1 10.46	1 8.27
(a) Anamalais—			Java ...	1 5.54	1 5.53	1 1.07
Thaymudi ...	223	1 10½	Sumatra.	1 6.07	1 7.59	1 4.42
Thonimudi ...	332	1 10¼	Nyassa-	1 2.83	1 6.45	1 2.82
Periakaramalai ...	247	1 9¾	land.			
Kallyar ...	182	1 9¾	Total ...	*1 8.38	†1 9.21	†1 6.10
Naduar ...	177	1 9¾				
(b) Central Travancore.			(B) COFFEE			
Stagbrook ...	132	1 9¼	London Prices (seven days ending May 25, 1926)			
Glenmary ...	131	1 9¼				
Bon Ami ...	85	1 9¼				
Munjamullay ...	110	1 8¾				
(c) Coorg—						
Glenlorna ...	194	1 7¾				
(d) Kanan Devans—						
Vagavurrai ...	113	1 9¼	(a) Coorg—	bgs.	s. d.	Grades.
Talliar ...	70	1 8	Dalquareen...	107	135 6	1,2,3, 'P B' & 'T.'
Chattamanaar ...	95	1 7½	Sidapur ...	136	133 7	Do.
(e) Mundakayam—			Wudderhully.	94	131 4	Do.
Yendayar ...	60	1 8¾	Purchikadoo.	38	127 9	Do.
(f) Nilgiris—			(b) Mysore—			
Prospect ...	330	2 1¾	Santaveri ...	70	154 7	Do.
Nonsuch ...	126	1 11½	J. Santaveri...	304	147 0	Do.
Ibex Lodge ...	88	1 10½	H. C. S. I. ...	178	146 6	Do.
Bhawani ...	85	1 10½	Hospet ...	83	143 7	Do.
(g) Nilgiri-Wynaad—			Kulhatty ...	29	143 4	Do.
Seaforth ...	160	1 9¼	H. C. S. S....	78	137 10	Do.
Woodbriar ...	74	1 9				
(h) South Travancore—			(C) RUBBER			
Poonmudi ...	126	1 8	The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, June 15, 1926, was 20½d.			
Merchiston ...	93	1 7¾				
(i) Wynaad—						
Chulika ...	65	1 7½				
Erramaculla ...	114	1 7				
Elstone ...	86	1 6½				

** Based on 6,450 packages.

†† " " 66,281 "

†† " " 72,107 "

* Based on 78,353 packages.

† " " 1,253,711 "

† " " 1,055,820 "

(b) *Précis of Reports on the London Market received on Monday, June 14, and covering the seven days ending Tuesday, May 25 :—*

(1) *Tea.*—The Indian teas offered on Tuesday the 18th ulto. sold at firm to dearer prices, and found a steady demand all round. Auctions were then suspended on account of the Whitsuntide Holidays until Monday, May 31.

The Indian Tea Association estimates the yield to the end of April 1926 at 18½ million pounds as compared with 17 million and 9¼ million respectively at the same periods of 1925 and 1924. The bonded stocks in the United Kingdom on April 30, 1926, were 179,891,000 lbs.

(2) *Rubber.*—During the week under review the London stocks decreased to 19,023 lbs.

The American questionnaire gives consumption and arrivals during April as 32,695 tons and 32,678 tons respectively : the corresponding figures for March being 32,936 tons and 42,677 tons. It is satisfactory to note that the excess of 10,000 tons by which arrivals exceeded consumption in America during March was converted in April into deficit of a few tons; and this encourages one to the belief that we have reached the turning point in the set back which the American rubber industry has sustained through the inclement weather experienced since the beginning of this year.

(3) *Coffee.*—Mysore, and to a lesser extent Coorgs, proved quite attractive at the auctions held on the 20th ulto. ; which, owing to the Whitsuntide Holidays, were the last sales until the 27th. On the 22nd ulto. stocks in London of African, Indian and other kinds respectively were given (in bags) as 40,735, 19,097 and 121,959 ; as compared with 39,290, 29,008 and 129,655 at the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, June 6, 1926, to Saturday, June 12, 1926 (both days inclusive.)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	2.39	16.24	18.63	19. Coonoor ...	0.04	3.84	3.88
2. Kalthuritty.	4.84	16.70	21.54	20. Kotagiri ...	0.85	5.34	6.19
3. Tenmalai ...	7.22	14.45	21.67	21. Ootacamund	1.61	10.61	12.22
4. Mundakayam.	N.R.	N.R.	N.R.	22. Yercaud ...	6.50	6.96	13.46
5. Peermade...	8.84	14.35	23.19	23. Devala ...	5.49	3.27	8.76
6. Twyford ...	9.95	15.40	25.35	24. Gudalur ...	2.41	2.80	5.21
7. V'periyar ...	3.68	6.45	10.13	25. CALICUT ...	8.55	6.72	15.27
8. Kalaar ...	10.72	10.94	21.66	26. Kuttiyadi ...	9.81	7.16	16.97
9. Chittuvurrai	0.52	10.78	11.30	27. Vayittiri ...	8.82	4.56	13.38
10. BODI'KANUR	...	3.28	3.28	28. Manantoddi.	3.35	3.48	6.83
11. COCHIN ...	12.07	14.47	26.54	29. Billigiris ...	0.85	6.18	7.03
12. Mooply Valley.	12.92	10.25	23.17	30. Sidapur ...	1.10	9.60	10.70
13. Pachaimalai	N.R.	9.33	N.R.	31. Pollibetta...	1.61	5.46	7.07
14. Mudis ...	11.30	13.52	24.82	32. Somwarpett	1.33	1.77	3.10
15. POLLACHIE.	0.43	4.52	4.95	33. Ballupete ...	0.30	1.95	2.25
16. Manjeri ...	8.21	6.82	15.03	34. MANGALORE.	10.53	2.49	13.02
17. Nilambur ...	N.R.	N.R.	N.R.	35. MADRAS ...	0.01	0.20	0.21
18. Naduvattam	2.33	3.24	5.57				

N.B.—(The Mundakayam figures for the weeks ending 5th and 12th insts., and the Pachaimallai figure for the week ending 12th inst. are in arrears.—ED.)

W = During the week.

P = Previously.

N.R. = No return.

(from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 26] SAT., JUNE 26, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 417	Circulars of the Rubber Specialist—	
Madras Planters' Consti-		Secondary Leaf Fall ...	422
tuency—Notice ...	... 419	Tea in the Nilgiris ...	431
A Talk About Coffee ...	... 420	Exports of Coffee, Rubber and	
W.C.P.A. Meeting ...	... 421	Tea ...	... 432
		Commercial and Meteorologi-	
		cal ...	... 433

EDITORIAL NOTES

We invite attention to the Notice appearing on page 419 under the signature of the Registration Officer of the Madras *Planters' Electoral Roll* Planters' Constituency, who is of course the Secretary of the U.P.A.S.I. It is hoped that, in compliance with the second paragraph of that Notice every potential elector will satisfy himself at the Office of his District Association as soon as possible after the 26th instant that his name has been included, and included with all correct particulars, in the preliminary roll; so that he may, if necessary, be in a position to submit a revisionary claim to the Registration Officer, P.B. 155, MADRAS, in good time before August 3, 1926. In a non-political paper we have no desire to labour, and content ourselves with mentioning, the indisputable fact that in the present political situation the franchise is a privilege which the European in India can no longer afford to ignore.

Our 'Tea' précis on page 434 indicates that the position of the Tea industry at present is very much more satisfactory than it was twelve months ago. That consumption has satisfactorily overtaken imports is indicated by the fact that *The Prospect of Tea* during April alone the bonded stocks in the United Kingdom declined by no less than 15½ million lbs.; and, at the end of that month, were 35 million lbs. below the figure for the corresponding date of last year. There seems every indication, therefore, that the new season will probably open with stocks at some 40 million lbs. under those which were in the Bonded Warehouses when the previous season commenced. It is, of course, too early in the season to estimate reliably the probable Northern Indian crop; but it seems obvious that, unless it is up to normal, a real shortage of tea is to be anticipated; and, in any event, we think producers may confidently look for at least a continuance of, if not an advance on, present prices which, of course, are 2d. to 3d. above those of this time last year.

Brazil Wants Labour Captain Francis McCullagh, writing from Brazil to *The Times of India*, states that a Brazilian representative is now in India investigating the possibilities of procuring a Labour Force of 10,000 East Indians for agricultural work—largely on rubber plantations—in Brazil. No publicity appears to have been given in India to the arrival (if he HAS arrived) of the representative in question, or to any attempt on the part of Brazil to induce the Governor-General-in-Council to exempt that country by special notification from the operation of Act VII of 1922 which prohibits the emigration of Indian Labour to countries which have not been, by such a notification, specially authorized to recruit. If such exemption be eventually granted, however, the Government of India will doubtless see—as it did in the case of British Guiana to which we referred in our issue of March 27, 1926—that the interests of the emigrants are fully safeguarded by the Conditions of Employment offered by the Government of Brazil. Amazonas, for which we understand that the labour is required, is one of the two (Para being the other) Northern low-lying rubber-producing States of Brazil, has a population of about half a million, and covers an area of some 700,000 square miles. It is thus topographically in contrast with Sao Paulo of coffee fame, which is one of the smaller states to the mountainous south, and can boast of at least one peak which is 9,000 feet high. The official language of the country is, of course, Portuguese; and the Executive consists of a Council of Ministers who are responsible, not to the Legislature, but to the President of the Republic who is elected for a term of four years.

The R. G. A. As indicated on page 434 Mr. W. D. Campbell, the outgoing Chairman of the R.G.A., is not pessimistic about the future of rubber; and his opinion is shared by his successor in the Chair, Mr. Edmund Becher Skinner, who recently informed a representative of the 'Rubber Age' that he 'personally had a firm belief in the position of the industry and could not see any indication that it is likely to fizzle out.' Mr. Skinner went to Malaya in 1891, and before he retired in 1914 had served on the Selangor State Council, and the Federal Council, and had also been the Chairman of the P.A.M. In the above mentioned interview he stated that he rather doubted the practicability of the various American schemes for Rubber Production: he had, for example, been able to get no reliable information as to the much boosted Liberian project, and he felt that the scarcity of labour and the insecurity of land tenure would make capitalists rather shy of investing large sums of money in the Philippines.

Scottish Tea? Scotland has already won fame as a manufacturer of the particular beverage which has been the subject of a very controversial legislative enactment in the United States in recent years. At least one person, however, who should be in the know sees no reason why it should not also specialize in the production of another draught which proverbially cheers; for a portion of the London Press has recently given publicity to a suggestion from an old tea man, Mr. George Hamilton that the West Highlands could grow admirable tea. He points out that the laurels, myrtle and rhododendrons which flourish there are all closely allied to the tea plant; and that nobody who has seen the flowering of the latter in particular and the following 'flush' could doubt that tea would be a success. So one day we may have not only Ben Nevis Whisky but also Ben Cruachan Tea.

In a recent review Messrs. Heath & Co. of Calcutta suggest that the most interesting features of last year's tea market has been the increase in the demand from Russia which imported 3,940,000 lbs. of Indian tea in 1925 as against 982,000 lbs. 1924. This 3,000,000 lbs., however, is but a small proportion of the total increase in her imports which amounted to no less than 35,750,000 lbs. China alone sent her 20,000,000 lbs. more in 1925 than in 1924; while the increases from London, Ceylon, and China respectively were 7,750,000 lbs., 10,000,000 lbs., and 2,000,000 lbs.

*The Russian
Tea Market*

MADRAS LEGISLATIVE COUNCIL

Electoral Roll—Madras Planters' Constituency

The Governor in Council directs that the following programme for the different stages in the preparation of the Electoral Rolls for the constituencies of the Madras Legislative Council be prescribed:—

- (i) *Publication of the Preliminary Rolls.*—Not later than Tuesday, July 3, 1926.
- (ii) *Filing of Claims and Objections.*—Not later than Tuesday August 3, 1926.
- (iii) *Publication of the List of Claims and Objections.*—Not later than Tuesday, August 10, 1926.
- (iv) *Commencement of the Sittings of the Revising Authority.*—Not later than Tuesday, August 17, 1926.
- (v) *Publication of the Final Rolls.*—Not later than Tuesday, September 14, 1926.

NOTICE

The preliminary electoral roll of voters for the Madras Planters' constituency will be published on Saturday, June 26, 1926; and a copy can be seen at the offices of the United Planters' Association of Southern India, 1st Line Beach, Madras, and at the offices of the Honorary Secretaries of the Planters' Associations, members of the U.P.A.S.I.

Any person who claims to be entered in this roll, and who is not entered in it, or is entered in an incorrect place or manner or with incorrect particulars, may put in a claim to the registration officer to have his name entered, or the registry corrected.

Any person whose name is on this roll, and who objects to the correctness of the entry, or to the inclusion of his own name or of the name of any other person whose name is on the roll, may prefer an objection to the Revising Authority.

Claims and objections may be presented or sent by post to the Registration Officer at any time during office hours; but must reach him on or before 4 p.m. on August 3, 1926. Claims and objections which are not received by the time and date prescribed will be rejected.

All claims and objections received in time and in proper form will be considered by the Revising Authority at the Office of the United Planters' Association on August 14, 1926.

H. WADDINGTON,
Registration Officer,
Madras Planters' Constituency.

A TALK ABOUT COFFEE

BY

SIR FRANCIS WATTS, K.C.M.G., D.Sc.

(Concluded from page, 414 issue of June 19, 1926)

A word may be said about the preparation of coffee for market. There are two principal methods, the wet and the dry, the former giving rise to what is known on the market as 'washed coffee.' The wet method of preparation can only be carried out in places where there is an abundant supply of good water so that while it may be employed in the case of plantations in the northern range of hills where there are numerous clear streams, it is not likely to find application in the lowlands.

In the wet method of preparation the cherries are thrown into tanks full of water where they remain for about 24 hours; this softens the outer skin and the pulp, facilitating their removal by machines known as pulpers which rub off the outer skin and pulp leaving the berry in the parchment. After coming from the pulpers the partially cleaned berries are allowed to soak in water for from 24 to 26 hours, during this time the remaining pulp undergoes fermentation whereby it is rendered more easily separable from the berries; this separation is effected by stirring and further soaking until all the pulp is removed after which the clean berries in the parchment are dried, usually on concrete platforms in the sun, a process taking ten days or more, during which time it is necessary to protect them from rain and heavy dew. This final process is very similar to that with which Trinidadians are familiar in the drying of cacao.

The dry method of preparing coffee is the older one and is very largely practised in many coffee-growing countries including Brazil and Venezuela. In this process the cherries are spread in the sun in thin layers on properly constructed drying grounds. This drying process takes some days, during which time the cherries must be protected from rain and heavy dew. I am told that in Trinidad it is sometimes the practice to collect the cherries in heaps and to allow them to heat and ferment before spreading them out to dry. Or, sometimes it is the custom to bruise the cherries so as to break the outer skin in order to facilitate drying. I think that it is desirable that enquiries should be made as to the soundness of these practices, for I am informed that if when spread out to dry the cherries are not spread thinly enough, but are allowed to become heated, from fermentation, the silverskin sticks to the coffee bean and frequently leads to a discolouration of the berries. After the cherries are dry the skin and pulp are removed either by beating in a mortar or some similar arrangement, or they are removed by machines known as hullers.

Both the wet and the dry methods leave the coffee berries in the parchment; this, with the silverskin inside it, are husked off either by hand processes of beating and winnowing, much as in the case of rice, or the parchment and silverskin are removed by machines which clean off the coverings and polish the berry, after which it is ready for grading.

Grading to size is best done by machinery which separates the berries into their respective grades and removes any dirt and waste. After grading to size it is necessary to pick over the berries carefully by hand, so as to remove discoloured beans, a process which cannot be done by machinery.

I would once more emphasize the importance of strict attention to cleaning and grading for on this will depend to a large extent the position which Trinidad will occupy on the market and the price it will command. It will not be difficult to adopt sound methods at this stage while the industry is yet small and before too many vested interests have been created: later on it will be difficult to correct mistakes. Now is the time when a foundation based on sound practice can be laid and the industry placed in a sound and creditable position.

The Magazine of the Agricultural Society of Trinidad and Tobago.

DISTRICT ASSOCIATION MEETING

WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of an Extraordinary General Meeting held at the Mooply Valley Club
on Saturday, June 12, 1926, at 11 a.m.

Present

The Mooply Valley Rubber Co., Ltd.	...	<i>per</i>	Mr. W. F. Campbell.
Kaliyar Estate	...	..	Mr. H. R. Carson Parker.
The Kerala Calicut Estates, Ltd.	...	..	Mr. G. D. Olivier.
Private Member	...	...	Mr. H. J. Walmesley.
"	...	...	Mr. C. E. M. Browne,
			<i>Chairman.</i>
"	...	...	Mr. J. T. Murray,
			<i>Honorary Secretary.</i>
			and
Visitor	...	...	Mr. J. G. Mitchell.

1. The Notice convening the meeting was read.

2. The following resolution passed at the Extraordinary General Meeting held at the Cochin Club on Saturday, May 22, was put to the meeting and confirmed.

That the Articles of Association of the West Coast Planters' Association be altered in the manner following:—

That in the 2nd Para of Article 7 the words 'Rupees five' shall be substituted for the words 'Rupees Twelve.'

C. E. M. BROWNE,
Chairman.

J. T. MURRAY,
Honorary Secretary.

CIRCULARS OF THE RUBBER SPECIALIST

No. 3 :—SECONDARY LEAF FALL DISEASE OF RUBBER

BY

HERBERT ASHPLANT, A. R. C. S., RUBBER
SPECIALIST, U. P. A. S. I.

A. MANURING EXPERIMENTS

The great success of spraying as a preventative of Secondary Leaf Fall and the desirability of giving prominence to this remedy and attention to improved means of applying it have lessened the interest and importance of the other measures in which a solution was sought. There are however reasons why the less successful experiments undertaken should not be allowed to go unrecorded, and if only for the reason that we sometimes learn more from our failures than from our successes, their publication may be of service.

No one familiar with the disease can fail to notice that well-nourished Hevea trees are less susceptible to Secondary Leaf fall than trees that have been impoverished by loss of top soil or by overtapping, and from the fact that the distribution of the disease in intensity follows to some extent nutrition variations in the soil, it would appear conceivable that a specific might be found in one or other of the well-known manures, failing these, in some soluble chemical.

The hopes founded on these observations are not altogether devoid of justification. Research on plant diseases has, in recent years, considerably widened in scope, and studies of the environmental conditions of infection and the interactions between parasite and host have led to important results. In the case of certain crops, disease resistance has been found to depend on factors which can be influenced by manuring or soil treatment, and this aspect of the problem is full of suggestive ameliorative possibilities.

The first worker to apply himself in earnest to an investigation of plant disease from this angle was the Italian botanist Orazio Comes. Between the years 1910 and 1918, Comes enunciated several new theories regarding the origin and nature of plant disease, on the basis of which he attempted to found a scientific theory of plant disease prophylaxis. Comes's theories are not without interest to planters generally, and as they explain the purpose underlying some of the experiments to be described later, in which they were put to the test, a summary may be given here.

B. THEORY OF DISEASE RESISTANCE

Seeking for an explanation of the relative freedom from disease epidemics shown by wild plants, Comes brings under survey in turn the respective influences of morphological, anatomical and chemical characters. He first of all draws attention to those hardy features of wild plants with which we are familiar. Wild plants have denser tissues, coarser skins, a

less juicy fruits than related plants under cultivation. Progressive selection and continuous cultivation have succeeded in making plants more edible at the cost of their defensive characters. Together with an enlargement of their organs, there has gone an increase in the volume of the cellulose as against the woody elements, the fruits and tissues generally having become more succulent and penetrable. While the alterations in these anatomical characters have immensely increased their vulnerability to parasitic attack, the lessened resistance of cultivated plants to adverse influences, is, Comes holds, not so much a consequence of this as of chemical changes. Under the harder conditions of their existence wild plants develop a marked acidity in their cell juices. The presence of organic acids in their organs make them less inviting to insect parasites, and since a highly acid medium is unfavourable to fungal development they succumb less readily to mycological enemies also. The organic acids such as Malic acid have the greatest protective value, but the tannins, which are acid substances, and colouring bodies like Antocyanine also have a valuable protective effect against invaders.

While resistance to parasites is intimately connected with the degree of acidity, the receptivity to parasites, on the other hand, is related to the quantities of reducing sugars in the cell sap, sugary juices being attractive to both insects and fungi. Sugars are present only in comparatively small amounts in wild plants. In the process of domestication however, reducing sugars are plentifully developed, the organic acids diminishing as the sugars increase. To some extent of course, these changes are the outcome of purposive selection, for they underlie the greater edibility or utility which gives them their appeal to man as well as their various enemies, and which is the object of the breeders' efforts. But cultivation too has a large share. Under more favourable soil conditions and especially when nitrates are present in full amount or supplied in excess in manures, the production of reducing sugars is favoured at the expense of organic acids. That cultivation brings about the chemical transformation described is generally true, and in these changes we have, according to Comes, the chief explanation of the relatively greater susceptibility to disease of cultivated compared with wild plants.

The Acid Theory of Disease Resistance derives support from many sources. Of great importance is that provided by the behaviour of fungi in culture experiments. Numerous experiments have shown that while fungi differ considerably in the degree of acidity they will stand, a high degree of acidity, as measured with the hydrogen ion concentration, is generally inimical to their development. Though less consistent, the results obtained by studies of immune and susceptible plants give interesting confirmatory testimony. Comes cites the following plants, amongst others in which a greater acidity or the cell sap had been found associated with greater resistance :—

(a) Wheat to Rusts, Vine stalks to *Oidium* and *Mildew*, Olives to *Cycloconium*, potatoes, pinks, and hyacinths to bacterial infection, and fruit plants in general to root rot and gummosis. With regard to animal parasites, the acidity of the cell sap was shown to constitute a defence in numbers of plants, and in the following in particular: Vines from *Phylloxera*, Citrus plants from *Pseudococcus* and scale insects, Olives from the 'Fly,' etc.

The instances given do not exhaust the list of plants in which resistance is claimed to be associated with high sap acidity, but they will suffice here. We may turn now to Comes's system of disease prophylaxis, dealing with for brevity's sake only the portion concerned with manuring.

C. MANURES AND PLANT DISEASE

Starting with nitrogenous manures, Comes points out that these, especially when applied in excess, generally stimulate an increased development of parenchyma and chlorophyll containing tissue, characterized by exceptionally thin cell walls. This greater volume of active tissue entails high starch production, and a consequent increase in reducing sugars, with, as we have seen, a corresponding diminution in the quantity of organic acids. Nitrate of soda is the nitrogenous manure, which more than any other helps to reduce the acidity of their organs, and therefore, most tends to increase the susceptibility of plants to their various enemies.

On the other hand, Phosphate manure assists the transformation of soluble nitrogenous and starchy substances into insoluble nitrogenous substances or phospho-proteins. By assisting in the maintenance, or increasing the acidity of the cell sap, phosphate manure thus strengthens their resistant powers against parasites. At the same time, in virtue of their action in accelerating their development of fruits and the lignification of branches, this manure has a further protective value. Of the phosphate manures Superphosphate is the most valuable in this connection.

With regard to Potassium, Lime, Iron and Magnesia, these chemical elements it is contended should be applied to plants in the form of sulphates exclusively, the reason given being that the separation of the corresponding elements by the roots releases Sulphuric acid and this, even in small quantities, will, by recombining, increase in the plant juices the quantity of acid in circulation.

The foregoing represents the extent of Comes's manuring recommendations. Summed up they may be said to amount to a condemnation of nitrogenous manures, Sulphate of Ammonia being alone advised where the soil conditions obviously call for nitrogen. In order to ward off as far as possible attacks of injurious insects or fungi, prophylaxis should be based on Phosphatic manures more or less assisted by an addition of Sulphates.

Since the object is to expound rather than to criticize, it is not proposed here to say much at this stage on the reliability or otherwise of the views just outlined. To prevent any misunderstanding however, it may be well to remark that only the negative advice regarding nitrogen has been shown to have any substantial body of experience behind it. While Comes's positive recommendations for strengthening plants against disease contain a modicum of truth, and may hold good in the case of certain crops, the evidence for their general application is scanty, and they would appear to be founded on venturesome generalizations rather than on experience, or reliable scientific theory. This much may be said by way of caution. Until we have a fuller knowledge of the chemical reactions that take place in plant tissues, all measures proposed for the modification of these reactions which proceed from theory will be open to the latter objection. Theories can only have a suggestive value. The work of Comes has been referred

to at some length because it professes to offer a rational explanation of the especial proneness of cultivated plants to disease. His attempt to found a scientific system of disease prophylaxis would, if well grounded, open up new avenues of attack upon these problems. Stimulated by its promise, many other investigators have taken up the study of disease and immunity from this angle. With regard to the acid theory of immunity, fresh instances have been discovered. Kirchner reports that he detected a striking correlation between the acid content of different varieties of wheat, and their resistance to smut and rust. He compared two winter and summer wheats, one of which was resistant to yellow rust, and the other susceptible. In both cases the acid content was found to be higher, and the sugar content lower in the resistant varieties. Though Kirchner's results have since been called into question, the evidence accumulated from different sources nevertheless indicates the existence in large numbers of plants of a connection between high acidity and resistance to disease. Such a simple relation does not, it must be admitted, always hold, and in cases where it can be shown to apply, it is probably not in itself, an all sufficing explanation of immunity, but most observations confirm the general proposition that immunity has a chemical basis. Plants that are anatomically and in other ways vulnerable to disease own their immunity where it exists, to the production in their cell sap of substances chemically antagonistic to parasites.

We may now leave the general theories and consider their application to our own particular problem. The views of the Comes's school added to the facts of distribution of Leaf Fall Disease, which indicate that tree nutrition has a considerable bearing on the problem, led the writer to initiate an extensive series of manuring experiments against Secondary Leaf Fall. Apart from the hopes engendered by the newer theories, this line of attack recommended itself by its practicability, since, the alternative method of protection—spraying—then seemed to present such great mechanical difficulties as to make it impracticable. The destruction of the sources of disease, the remedy proposed by McRae, has been demonstrated to be neither effective nor practicable.

While this lengthy introduction leaves little more to be said by way of explanation of the manuring experiments hereafter described, one can scarcely pass on to their consideration without reference to a contribution on the subject that has recently appeared from the Ceylon side.

In a series of culture experiments in medii of differing acidity with *Phytophthora faberi*, the causal fungus of Secondary Leaf Fall in Ceylon, Stoughton-Harris noted that between the PH values of 4.5 and 5.5 a small decrease in the PH value of the medium, that is to say, a small increase in its acidity, caused a very considerable decrease in the growth of the fungus. He concludes from this that if by manuring or by any other means the degree of acidity of the leaves, stalks, and pods of Hevea could be brought within this range, it is possible that the virulence of the attacks of Secondary Leaf Fall might be appreciably diminished.

The conclusion just mentioned is particularly interesting, since, as has been shown, it was precisely with this idea of bringing about changes in the cell sap of Hevea unfavourable to *Phytophthora* that all the manuring experiments in South India have been undertaken. Although the Ceylon

report only appeared last year, too late to have any influence on the design or course of these experiments, it is interesting to have this demonstration of the applicability of the 'acid theory' to our own particular problem. Besides the satisfaction of having one's surmises confirmed, it is gratifying to note that later research shows one's experiments to have been well and truly laid.

D. FIRST MANURING EXPERIMENTS AGAINST SECONDARY LEAF FALL

Thanks to the generosity of Messrs. Parry, and Stanes, who presented the manure, and to Mr. J. R. Vincent, who provided the site, manuring experiments were commenced in February 1922, on Redlynch Estate, Mundakayam. The leading ideas underlying the choice of the manures selected for these experiments will already have been gathered from the discussion on the preceding pages. Since the first object was to ascertain whether the incidence of Secondary Leaf Fall could be influenced at all by manures, the largest number of plots were laid down with those manures which from the principles described, might be expected to have the greatest effect. Every phosphate manure was given a trial, the changes being rung upon, Superphosphate, Basic Slag, Blood and Bone Meal, Guano, and Acid, Sodium and Potassium phosphates in more than a score of plots. The sulphates applied included Ammonium and Potassium and Calcium Sulphates in large doses, and the Sulphates of Iron, Aluminium, Copper, Magnesium, and Sulphuric Acid in smaller amounts.

For some time past we have heard little about Potash as a manure for rubber, but at one time, every writer on rubber topics let himself go on its alleged benefits. In that entertaining example of journalism *The Rubber Tree Book* by Maclaren, the author ascribes most of the afflictions of the Hevea tree, Brown Bast included, to potash starvation. While beliefs like these are absurd, Potash was too important an element to be missed, particularly in view of the experiments of Andrews (who showed that tea bushes to which potassium salts had been directly administered, threw off attacks of Mosquito Blight), so it figures prominently in the scheme.

Besides the three common potash manures, Potassium Sulphate, Nitrate and Muriate, plots were manured with Potassium Carbonate, Bichromate, Permanganate, Chlorate, Hydroxide, even dangerous poisons like Potassium Cyanide being given a turn.

No special theory dictated the use of Borax, Manganese, Sulphur, Calcium Sulphide, Sodium and Zinc Chlorides, and Arsenious Acid, and though for such chemicals as Borax, Sulphur, and Magnesium, beneficial effects are sometimes claimed, these and the other chemicals were applied both singly and in conjunction with manures, more in the hope that a chance shot would hit the target than from any clearly conceived plan.

The theories of Comes, and the general experience of the effect of nitrogen in increasing the susceptibility of plants to disease—the very thing one wished to avoid, would appear to discount offhand any chance of nitrogenous applications proving successful. Nevertheless, one could not afford to ignore one of the striking facts about leaf fall disease, viz., that trees near coolly lines, where they have opportunities of extra supplies of

nitrogen, resist attacks better than their neighbours lack these opportunities. This fact, and the well-nourished condition of the so-called 'disease-resistant' trees, which obviously had not suffered from short commons in regard to nitrogen, indicated the desirability of properly trying out nitrogenous manures, and accordingly, the plots in which these were utilized form no small part of the manuring scheme. Sodium, Potassium, Calcium and Ammonium Nitrates as well as Ammonium Sulphate, and other ammonium compounds were applied in varying doses in large numbers of plots, and as we shall see presently, it is fortunate that this element was not omitted.

In the course of seeking out the right manure, several factors had to be tested. An important point concerned the mode of application. As some experiments of the writer carried out in 1917 had shown that the damage done to Hevea roots when forking or digging in manure offset for some time the favourable influence of the manures, the method followed in nearly all cases was to get the manures to the roots without soil or root disturbance. Such of the manures as were soluble were, during February when no rains fell, dissolved in water, and sprinkled in with a watering can. With the onset of the rains, the soluble manures were scattered around the trees whence they were speedily washed down into the soil by the first shower. Poorly soluble, or insoluble manures like Basic Slag, Bone Meal, etc., were scattered in pits (made some years previously) and covered with leaves and mulch. These precautions insured that the mode of application would have no prejudicial effects likely to diminish or mask the effects of the manures.

A second factor which it seemed desirable to take into account was the time of application of the manures. It was feasible that the manures might have a bigger influence when applied at one period than others. The scheme contemplated was therefore to make the applications in some of the plots at the time of wintering, so that the manures, all of which were soluble, could be rapidly assimilated and built up by the trees into the new foliage. Thinking that a manurial stimulus either just before or right at the time *Phytophthora* attacks begin might better enable the trees to resist the attacks, applications were also made later. In some plots the manures were applied at about the wintering period only, and in others, just before the onset of Secondary Leaf Fall only. Other plots again received manure at both periods, some being given three applications.

While, as stated above, the manuring programme drawn up contemplated the application of manures in some of the plots before wintering had actually commenced, the late delivery of the manures unfortunately rendered this impossible, and by February 20, when the first manures were got in, wintering was already well advanced. Although, by the time the manures were applied the opportunity of gathering decisive evidence on one of the points of enquiry had passed, no chances of picking up any evidence on the influence of the time factor were missed. Observations were made on the stages of wintering of each tree in the first manured plots, and later on, during leaf fall season, the relative amounts of leaf fall in the individual plots were noted. It may be stated here that the observations showed it to be immaterial at what stage in the wintering the manures were applied.

A full description of the plots, the nature and quantities of manures applied together with date of application will be found in the following tables :—

MANURIAL EXPERIMENTS AGAINST SECONDARY LEAF-FALL, 1922

Plot	No. of trees in plot	Nature and quantity per tree of manures applied and dates of application			Extent of defoliation by <i>P. Meadii</i>				
		1st application from February 16th to 20th	2nd application from May 19th to 22nd	3rd application 23rd and 24th June	No. defoliation	10% defoliation	50% defoliation	75% defoliation	Complete defoliation
Aa	70	$\frac{1}{2}$ lb. sodium nitrate ...	Nil.	Nil.	4.3	31.4	23.0	34.3	7.0
Ab	37	$\frac{1}{3}$ lb. sod. nitrate ...	$\frac{1}{4}$ lb. sod. nitrate.	Nil.	10.8	29.7	24.3	32.4	2.8
Ac	44	$\frac{1}{3}$ lb. sod. nitrate ...	$\frac{1}{4}$ lb. pot. nitrate.	$\frac{1}{8}$ lb. pot. nitrate.	9.1	40.9	22.7	25.0	2.3
Ba	82	$\frac{1}{2}$ lb. pot. chloride ...	Nil.	Nil.	6.1	23.1	15.8	50.0	5.0
Bb	74	$\frac{1}{2}$ lb. pot. chloride ...	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	5.4	14.9	8.1	58.1	13.5
Ca	64	$\frac{1}{2}$ lb. pot. nitrate ...	Nil.	Nil.	6.2	12.5	12.5	56.3	12.5
Cb	45	$\frac{1}{2}$ lb. pot. nitrate ...	$\frac{1}{4}$ lb. pot. nitrate.	$\frac{1}{8}$ lb. pot. nitrate.	6.6	11.1	24.4	55.6	2.3
Cc	44	$\frac{1}{2}$ lb. pot. nitrate ...	$\frac{1}{2}$ lb. superphosphate.	$\frac{1}{8}$ lb. pot. nitrate.	4.6	13.6	9.1	59.1	13.6
Da	59	$\frac{1}{2}$ lb. pot. chloride and 2 lbs basic slag.	Nil.	Nil.	1.6	12.0	17.0	62.7	6.7
Db	83	$\frac{1}{2}$ lb. pot. chloride and 2 lbs, basic slag.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	3.6	23.0	24.1	39.7	9.6
Ea	60	$\frac{1}{2}$ lb. pot. nitrate and 2 lbs. basic slag.	Nil.	Nil.	11.6	25.0	23.4	35.0	5.0
Eb	83	$\frac{1}{2}$ lb. pot. nitrate and 2 lbs. basic slag.	$\frac{1}{4}$ lb. pot. nitrate.	$\frac{1}{8}$ lb. pot. nitrate.	10.8	23.0	18.1	37.3	10.8
Fa	64	$\frac{3}{4}$ lb. sod. nitrate, $\frac{1}{4}$ lb. pot. chloride and 2 lbs. basic slag.	Nil.	Nil.	14.1	18.7	23.4	39.1	4.7
Fb	38	Do.	$\frac{1}{4}$ lb. sod. nitrate.	Nil.	34.0	29.0	16.0	21.0	...
Fc	42	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride	9.5	50.0	14.3	23.9	2.3
Ga	57	$\frac{3}{4}$ lb. calcium nitrate ...	Nil.	Nil.	12.2	21.1	17.5	38.7	10.5
Gb	42	Do.	$\frac{1}{4}$ lb. cal. nitrate.	$\frac{1}{8}$ lb. cal. nitrate.	2.4	11.9	11.9	61.9	11.9
Gc	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	2.5	30.0	10.0	57.5	...
Ha	57	$\frac{3}{4}$ lb. sod. nitrate, $\frac{1}{4}$ lb. pot. chloride and 1 lb. superphosphate.	Nil.	Nil.	15.9	31.5	17.6	31.5	3.5
Hb	39	Do.	$\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate	15.4	30.8	18.0	30.7	5.1
Hc	42	Do.	$\frac{1}{4}$ lb. cal. nitrate.	Nil.	12.0	38.0	12.0	31.0	7.0
Ia	91	$\frac{3}{8}$ lb. am. nitrate, $\frac{1}{4}$ lb. pot. chloride and 2 lb. basic slag.	Nil	Nil.	13.2	40.6	7.7	35.2	3.3
Ib	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	7.5	35.0	12.5	40.0	5.0
Ja	118	$\frac{1}{2}$ lb. am. sulphate and 2 lb. basic slag.	Nil.	Nil.	5.9	31.3	22.0	33.9	6.9
Jb	43	Do.	$\frac{1}{4}$ lb. am. sulphate.	$\frac{1}{8}$ lb. am. sulphate.	4.7	37.2	23.3	30.2	4.6
Ka	99	$\frac{1}{2}$ lb. am. sulphate, $\frac{1}{4}$ lb. pot. sulphate 2 lb. basic slag and 4 lb. (applied previously).	Nil.	Nil.	2.0	9.1	22.2	56.6	10.1
Kb	40	Do.	$\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate.	7.5	32.5	20.0	40.0	...
Kc	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	...	10.0	5.0	70.0	15.0
La	84	$\frac{1}{2}$ lb. am. sulphate.	Nil.	Nil.	2.4	26.2	20.2	42.9	8.3
Lb	40	Do.	$\frac{1}{4}$ lb. am. sulphate.	$\frac{1}{8}$ lb. am. sulphate.	7.5	22.5	30.0	37.5	2.5
Lc	40	Do.	$\frac{1}{4}$ lb. cal. nitrate.	$\frac{1}{8}$ lb. cal. nitrate.	7.5	10.0	27.5	42.5	12.5
Ma	129	$\frac{1}{2}$ lb. am. sulphate and 1 lb. superphosphate.	Nil.	Nil.	6.9	27.9	18.6	39.6	7.0
Mb	42	Do.	$\frac{1}{4}$ lb. am. sulphate.	$\frac{1}{8}$ lb. am. sulphate.	26.2	35.7	19.0	14.3	4.8

MANURIAL EXPERIMENTS AGAINST SECONDARY LEAF-FALL, 1922—(continued)

Plot	No. of trees in plot	Nature and quantity per tree of manures applied and dates of application			Extent of defoliation by <i>P. Meadii</i>				
		1st application from February 16th to 20th	2nd application from May 19th to 22nd	3rd application 23rd and 24th June	No. defoliation	10% defoliation	50% defoliation	75% defoliation	Complete defoliation
					%	%	%	%	%
Na	77	$\frac{3}{4}$ lb. am. sulphate, $\frac{1}{4}$ pot sulphate and $\frac{3}{4}$ lb. superphosphate.	Nil.	Nil.	7.8	30.0	16.8	40.2	5.2
Nb	40	Do.	$\frac{1}{4}$ lb. pot. sulphate	$\frac{1}{8}$ lb. pot. sulphate.	10.0	37.5	20.0	32.5	...
Nc	40	Do.	Nil.	$\frac{1}{4}$ lb. superphosphate.	15.0	35.0	20.0	30.0	...
O	158	4 lbs. lime ...	Nil.	Nil.	10.1	26.6	15.9	43.0	4.4
Pa	78	2 lbs. superphosphate...	Nil.	Nil.	12.8	42.3	7.7	34.6	2.6
Pb	39	Do.	$\frac{1}{4}$ lb. am. chloride.	$\frac{1}{8}$ lb. am. chloride.	2.6	43.6	12.8	28.2	12.8
Pc	40	Do.	$\frac{1}{4}$ lb. am. chloride and $\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate.	22.5	35.0	15.0	27.5	...
Qa	80	2 lbs. basic slag ...	Nil.	Nil.	10	41.2	15	2.25	11.3
Qb	42	Do.	$\frac{1}{4}$ lb. am. chloride.	$\frac{1}{8}$ lb. am. chloride.	16.7	21.5	21.4	38.1	2.3
Qc	41	Do.	$\frac{1}{4}$ lb. am. chloride & $\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate.	12.2	24.4	19.5	34.2	9.7
R	165	Control ...	...	...	7.0	39.0	18.0	30.0	6.0
Sa	83	$\frac{1}{4}$ lb. pot. sulphate and 1 lb. superphosphate.	Nil.	Nil.	6.0	16.9	15.6	43.4	18.1
Sb	42	Do.	$\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate.	4.7	9.5	19.1	64.3	2.4
Sc	47	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	...	4.3	17.0	55.3	23.4
Ta	81	$1\frac{1}{2}$ lb. am. sulphate and $\frac{1}{2}$ lb. pot. sulphate and $\frac{3}{4}$ lb. superphosphate.	Nil.	Nil.	8.6	29.6	23.4	37.1	1.3
Tb	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	...	27.5	22.5	40.0	10.0
Tc	42	Do.	Nil.	$\frac{1}{8}$ lb. pot. sulphate.	21.4	30.9	19.1	28.6	...
Ua	69	$\frac{1}{2}$ lb. am. sulphate $\frac{1}{2}$ lb. pot. sulphate and $\frac{3}{4}$ lb. superphosphate.	Nil.	Nil.	14.5	39.1	8.7	34.8	2.9
Ub	42	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride	4.7	30.9	14.3	45.3	4.8
Uc	41	Do.	Nil.	$\frac{1}{8}$ lb. pot. sulphate	12.2	39.0	31.7	17.1	...
Va	85	1 lb. am. sulphate, 1 lb. pot. sulphate and $\frac{3}{4}$ superphosphate.	Nil.	Nil.	17.7	29.4	16.5	31.7	4.7
Vb	42	Do.	$\frac{1}{8}$ lb. am. sulphate.	Nil.	16.6	23.8	9.6	38.1	11.9
Vc	42	Do.	$\frac{1}{8}$ lb. pot. sulphate.	Nil.	23.8	45.2	9.6	16.6	4.8
Wa	23	Control ...	...	...	21.1	36.6	11.3	27.0	4.0
Wb	141	$\frac{1}{2}$ lb. gypsum ...	Nil.	Nil.	7.3	43.9	22.0	22.0	4.8
Xa	150	Control ...	...	...	12.0	38.0	12.7	27.3	10.0
Y	164	Control ...	...	...	15.9	41.4	12.8	23.8	6.1
Za	74	$\frac{1}{4}$ lb. pot sulphate and 2 lb. basic slag.	Nil.	Nil.	10.8	23.0	28.4	27.0	10.8
Zb	39	Do.	$\frac{1}{4}$ lb. pot. sulphate	$\frac{1}{8}$ lb. pot. sulphate.	25.6	12.8	2.5	18.0	23.1
Zc	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{4}$ lb pot. chloride.	32.5	22.5	7.5	15.0	22.5

MANURIAL EXPERIMENTS AGAINST SECONDARY LEAF-FALL, 1922—(continued)

Plot	No. of trees in plot	Nature and quantity of manures applied and dates of application			Extent of defoliation by <i>P. Meadii</i>				
		1st application from February 16th to 20th	2nd application from May 19th to 22nd	3rd application 23rd and 24th June	No. defoliation	10% defoliation	50% defoliation	75% defoliation	Complete defoliation
A1a	67	$\frac{3}{8}$ lb. am. nitrate and $\frac{1}{4}$ lb. pot. sulphate and 2 lbs. basic slag.	Nil.	Nil.	30.0	25.0	12.0	27.0	6.0
A1b	40	Do.	$\frac{1}{4}$ lb. pot. sulphate	$\frac{1}{8}$ lb. pot. snlphaet	22.5	27.5	18.0	30.0	8.0
A1c	39	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride,	18.0	26.0	18.0	28.0	10.0
B1a	76	$\frac{1}{2}$ lb. am. sulphate $\frac{1}{4}$ lb. pot. sulphate and 2 lb. basic slag.	Nil.	Nil.	17.0	37.0	17.1	26.3	2.6
B1b	39	Do.	$\frac{1}{4}$ lb. am. sulphate and $\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. am. sulphate and $\frac{1}{8}$ lb. pot. sulphate.	33.0	36.0	15.4	15.3	...
B1c	35	Do.	$\frac{1}{8}$ lb. am. sulphate.	Nil.	17.0	43.0	8.5	31.5	...
C1a	78	$\frac{1}{2}$ lb. cal. nitrate and $1\frac{1}{2}$ lb. basic slag.	Nil.	Nil.	16.7	23.1	15.4	42.3	2.5
C1b	82	$\frac{1}{2}$ lb. cal. nitrate, $\frac{1}{3}$ lb. pot. chloride and $1\frac{1}{2}$ lb. basic slag.	$\frac{1}{8}$ lb. pot. chloride.	Nil.	23.2	30.6	15.9	27.9	2.4
D1a	61	Control ...	...	...	11.4	37.7	21.3	28.0	1.6
D1b	47	$\frac{1}{2}$ lb. am. nitrate.	Nil.	Nil.	17.0	30.0	15.0	38.0	...
D1c	30	Do.	$\frac{1}{8}$ lb. pot. chloride.	Nil.	10.0	43.0	20.0	23.0	3.4
E1a1	20	$\frac{1}{4}$ lb. sod. phosphate, $\frac{1}{4}$ lb. pot. chloride and $\frac{1}{4}$ am. nitrate.	Nil.	Nil.	10.0	40.0	15.0	30.0	5.0
E1a2	20	Do.	$\frac{1}{8}$ lb. pot. chloride.	...	5.0	5.0	45.0	40.0	5.0
E1b1	20	$\frac{1}{4}$ lb. sod. phosphate and $\frac{1}{4}$ lb. pot. chloride	Nil.	Nil.	15.0	35.0	25.0	20.0	5.0
E1b2	20	Do.	$\frac{1}{8}$ lb. pot. chloride.	Nil.	5.0	30.0	20.0	40.0	8.0
E1c	40	$\frac{1}{4}$ lb. sodium phosphate.	Nil.	Nil.	7.5	52.5	17.5	20.0	2.5
E1d	32	Control ...	...	...	18.7	37.5	9.4	34.4	...
F1	151	Control ...	...	...	21.2	38.4	22.5	13.3	4.6
G1a	83	$\frac{1}{2}$ lb. am. sulphate, $\frac{1}{2}$ lb. pot. sulphate and $\frac{1}{2}$ lb. basic slag.	Nil.	Nil.	14.4	15.7	18.1	25.3	26.5
G1b	46	Do.	$\frac{1}{4}$ lb. pot. sulphate.	$\frac{1}{8}$ lb. pot. sulphate.	4.3	6.5	4.3	24.0	60.9
G1c	40	Do.	$\frac{1}{4}$ lb. am. sulphate	$\frac{1}{8}$ lb. am sulphate	7.5	5.0	30.0	25.0	32.5
H1a	69	$\frac{1}{2}$ lb. pot. sulphate ...	Nil.	Nil.	5.8	7.2	26.1	43.5	17.4
H1b	40	Do.	$\frac{1}{4}$ lb. pot. sulphate	$\frac{1}{8}$ lb. pot. sulphate	12.5	30.0	30.0	25.0	2.5
H1c	40	Do.	$\frac{1}{4}$ lb. pot. chloride.	$\frac{1}{8}$ lb. pot. chloride.	...	22.5	32.5	30.0	85.0
I1a	80	1 lb. am. sulphate, $\frac{1}{2}$ pot. chloride and $1\frac{1}{2}$ lb basic slag.	Nil.	Nil.	8.0	22.5	16.2	37.5	18.8
I1b	42	Do.	$\frac{1}{8}$ lb. am. sulphate.	Nil.	21.4	38.2	14.3	24.0	2.1
I1c	37	Do.	$\frac{1}{8}$ lb. pot. chloride.	Nil.	10.8	16.2	19.0	46.0	8.0
J1	140	1 lb. am. sulphate, $\frac{1}{2}$ lb. pot. chloride and $\frac{3}{4}$ lb. basic slag.	Nil.	Nil.	15.7	31.4	22.1	27.8	3.0
K1a	40	$\frac{1}{4}$ lb. am. chloride (22-4-22).	Nil.	Nil.	...	10.0	40.0	40.0	10.0
K1b1	20	$\frac{1}{4}$ lb. am. chloride and $\frac{1}{4}$ lb. pot. sulphate.	Nil.	Nil.	15.0	28	5.0	45.0	10.0
K1b2	20	Do.	$\frac{1}{8}$ lb. pot. sulphate	Nil.	...	50.0	35.0	15.0	...
K1c	30	$\frac{1}{2}$ lb. sod. chloride (22-5-22).	Nil.	Nil.	6.6	50.0	50.0	36.7	...
K1d	32	Control ...	...	...	15.6	21.1	19.0	37.3	...

THE TEA INDUSTRY

IN THE NILGIRIS

Visitors to the Nilgiri Hills will have been struck, says a Writer in *The Pioneer*, with the large areas of land now under tea cultivation, and those who have not visited the hills for several years will be impressed by the rapidity with which this industry has grown in recent years. If one motors to the Nilgiris from the Mysore side, or up the Mettupalium Ghat the new estates can be seen, for many of them are still in the making ; while here and there large factories are being erected to deal with the produce. The increasing demand for tea, both in America and Europe, and the consequent good prices being received, has led to the development of a large number of new areas, here, as elsewhere, in South India. For the most part these are being opened by large companies, though here and there private individuals have opened small places. Coffee is, of course, still grown ; but the area devoted to this appears to be shrinking, and no such developments are taking place as in the tea industry. That the Nilgiri tea holds a high place in the European markets is well known, and all the signs seem to favour even greater activity in the near future. In the valleys on the Coonoor side, and near to Katery especially, new estates of considerable size are being prepared, and, before many years pass, one will get the same impression as in passing through the tea district of Ceylon, where for many miles nothing is seen on both sides the road but tea plantations. The climate of the Nilgiris seems to be most suitable, and, though the planting is not on so extensive a scale as on the neighbouring Anamalais, there is no reason why still larger areas of suitable land should not be developed.

INTERESTING HISTORY

Though the Nilgiris cannot claim to be the first of the places in India where tea was grown the industry has a long and interesting history, for it is nearly a hundred years since Assistant Surgeon Christie decided that he would plant here, as an experiment, some tea plants brought from China. He was led to do this because he noticed that a plant, the camelia, which closely resembles the tea plant, grew well on the Nilgiris. But the plants were not successful, as, in fact, few arrived fit for planting, and these did not receive the attention necessary for their development. Christie himself died before the plants, he had ordered, arrived. It was, however, an evidence of real enterprise that this man, who had become interested in botany as a hobby, should have made the experiment, which it was left for others to continue and make successful. As the tea proved successful in other parts of India where conditions were not dissimilar from those on the Nilgiris, it was felt by the Madras Government that something more should be done. Bentinck appointed a Committee to consider the question, and more seeds were brought from China, some of which were planted on the Nilgiris in 1835. In order that experimental work should be carried on a farm was opened at Ketu and Lovedale, but it cannot be pronounced to have been a success.

(To be continued)

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING APRIL, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	722	...	...	...	1	...	...	...
Calicut	1	...	645	265	...	...	...	253
Mangalore	858	...	156	2,794	5,396	...	...	179
Tellicherry	...	...	122	657	...	...	...	...
Bombay	...	...	...	9	210	...	...	...
Total	1,581	...	923	3,725	5,607	...	...	432
Previously	7,624	...	25,209	23,822	10,674	9	...	6,879
Total cwts. since 1-1-26.	9,205	...	26,132	27,547	16,281	9	...	7,311
<i>Rubber—</i>								
Calicut	...	39,135	38,997	...	...	...	...	...
Cochin	...	46,882	57,183	8,990	...	...	160,207	...
Mangalore	...	20,591	...	...	...	...	...	...
Tellicherry	...	...	1,643	...	...	...	...	...
Tuticorin	...	51,223	7,600	...	...	...	...	...
Alleppey	...	56,400	17,847	...	...	...	11,200	37,005
Total	...	214,231	123,270	8,990	...	...	171,407	37,005
Previously	...	1,575,603	1,422,666	42,249	...	...	442,287	35,840
Total lbs. since 1-1-26.	...	1,789,834	1,545,936	51,239	...	...	613,694	72,845
<i>Tea—</i>								
Madras	580	...	212,197	6,200	400	...	...	...
Calicut	47,514	71,553	688,253	...	240	3,040	...	...
Cochin	17,129	42,968	681,266	...	...	...	...	...
Mangalore	...	...	3,383	...	...	...	...	...
Tellicherry	315	...	40,880	...	...	...	...	...
Tuticorin	...	184,450	1,330,551	...	...	...	...	...
Alleppey	...	46,507	89,648	...	...	...	...	...
Total	65,538	345,478	3,046,178	6,200	640	3,040	...	...
Previously	...	...	...	...	...	...	...	...
Total lbs. since 1-4-26.	65,538	345,478	3,046,178	6,200	640	3,040	...	...

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending June 19, 1926
Bank Selling Demand Draft on London

14th	15th	16th	17th	18th	19th
17 7/8d.	17 7/8d.	17 29/32d.	17 29/32d.	17 29/32d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending May 22, 1926	January 1 to May 22, 1926	January 1 to May 22, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING MAY 22, 1926)			N. India.	1 8.05	1 9.14	1 5.90
			S. India	**1 9.16	††1 9.69	††1 6.41
			Ceylon...	1 10.01	1 10.46	1 8.27
(a) Anamalais—			Java ...	1 5.54	1 5.53	1 1.07
Thaymudi ...	223	1 10½	Sumatra.	1 6.07	1 7.59	1 4.42
Thonimudi ...	332	1 10½	Nyassa-	1 2.83	1 6.45	1 2.82
Periakaramalai ...	247	1 9¾	land.			
Kallyar ...	182	1 9¾	Total ...	*1 8.38	†1 9.21	†1 6.10
Naduar ...	177	1 9¾				
(b) Central Travancore.			(B) COFFEE			
Stagbrook ...	132	1 9½	London Prices (seven days ending June 1, 1926)			
Glenmary ...	131	1 9½				
Bon Ami ...	85	1 9½				
Munjamullay ...	110	1 8¾				
(c) Coorg—						
Glenlorna ...	194	1 7¾				
(d) Kanan Devans—						
Vagavurrai ...	113	1 9½	Mysore—	bgs.	s. d.	Grades.
Talliar ...	70	1 8	H. C. S. ...	67	143 7	1,2,3, 'P B' & 'T.'
Chattamanaar ...	95	1 7½	H. C. S. I. ...	45	142 9	Do.
(e) Mundakayam—			H. C. S. S. ...	63	139 5	Do.
Yendayar ...	60	1 8¾	C. C. J. ...	38	134 1	Do.
(f) Nilgiris—						
Prospect ...	330	2 1¾				
Nonsuch ...	126	1 11½				
Ibex Lodge ...	88	1 10½				
Bhawani ...	85	1 10½				
(g) Nilgiri-Wynaad—						
Seaforth ...	160	1 9½				
Woodbriar ...	74	1 9				
(h) South Travancore—						
Poonmudi ...	126	1 8				
Merchiston ...	93	1 7¾				
(i) Wynaad—						
Chulika ...	65	1 7½				
Erramaculla ...	114	1 7				
Elstone ...	86	1 6½				

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, June 22, 1926, was 20½d.

** Based on 6,450 packages.

 †† " " 66,281 "
 †† " " 72,107 "

* Based on 78,353 packages.

 † " " 1,253,711 "
 † " " 1,055,820 "

(b) *Précis of Reports on the London Market received on Monday, June 21, and covering the seven days ending Tuesday, June 1 :—*

(1) *Tea.*—Auctions recommenced after the Whitsuntide Holidays on Monday, May 31st ; so that, of course, the London Tea Brokers' Association had no prices for publication in relation to the week ending Saturday, May 29th.

We learn that at the Sale of the 31st there was a good general demand for Indians : commons and mediums showing a slight advance and other kinds remaining firm. The bonded stocks in the United Kingdom on April 30, 1926, were 179,891,000 lbs. as against 195,338,000 lbs. on March 31st and 215,477,000 lbs. on April 30, 1925.

(2) *Rubber.*—During the week under review stocks increased by 1,154 tons to 20,177 tons ; and in this connection it may possibly be pertinent to refer to the remarks made by Mr. W. D. Campbell, when presiding at the Annual General Meeting of the Rubber Growers' Association on April 30th, to the effect that he considered many people regarded the recent increases in London stocks from an entirely wrong perspective and looked on it a danger spot ; whereas, in reality, the margin on which the market was working last year was undoubtedly dangerously small and the increase since experienced could, without prejudice to the interests of producers, be still very considerably augmented ; because even at present the stocks only represented some ten days' supply.

(3) *Coffee.*—Auctions reopened after Whitsuntide on Thursday, May 27 and the very small quantity of Indians (213 bags in all) on offer was disposed off with ease at prices which (*vide* page 433) showed an advance on those which obtained during the previous week.

III. Weekly Rainfall Statement

From Sunday, June 12, 1926, to Saturday, June 19, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	4.78	18.63	23.41	19. Naduvattam	1.79	5.57	7.36
2. Kalthuritty.	5.69	21.54	27.23	20. Coonoor ...	0.38	3.88	4.26
3. Tenmalai ...	8.18	21.67	29.85	21. Kotagiri ...	0.38	6.19	6.57
4. Mundakayam.	8.77	17.18	25.95	22. Ootacamund	0.03	12.22	12.25
5. Peermade...	8.62	23.19	31.81	23. Yercaud ...	1.49	13.46	14.95
6. Twyford ...	10.25	25.35	35.60	24. Devala ...	N.R.	8.76	N.R.
7. V'periyar ...	3.52	10.13	13.65	25. Gudalur ...	2.10	5.21	7.31
8. Kalaar ...	7.86	21.66	29.52	26. CALICUT ...	9.88	15.27	25.15
9. Chittuvurrai	0.22	11.30	11.52	27. Kuttiyadi ...	N.R.	16.97	N.R.
10. BODI'KANUR	0.27	3.28	3.55	28. Vayittiri ...	7.89	13.38	21.27
11. COCHIN ...	8.55	26.54	35.09	29. Manantoddi.	3.20	6.83	10.03
12. Mooply Valley.	5.57	23.17	28.74	30. Billigiris ...	0.32	7.03	7.35
13. Pachaimalai	2.93	14.83	17.76	31. Sidapur ...	2.03	10.70	12.73
14. Mudis ...	6.97	24.82	31.79	32. Pollibetta...	3.28	7.07	10.35
15. Nell'pathy...	4.73	5.07	9.80	33. Somwarpett	2.08	3.10	5.18
16. POLLACHIE.	0.32	4.95	5.27	34. Ballupete ...	3.28	2.25	5.53
17. Manjeri ...	6.46	15.03	21.49	35. MANGALORE.	9.50	13.02	22.52
18. Nilambur ...	N.R.	N.R.	N.R.	36. MADRAS ...	0.39	0.21	0.60

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 27] SAT., JULY 3, 1926 [PRICE. AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 435	Coffee—Empire Sources of	
Ourselves ...	... 437	Supply ...	... 444
Nilgiri Planters' Association		Tea in the Nilgiris ...	... 445
Meeting ...	... 438	Why ...	... 446
U.P.A.S.C. Notice ...	... 443	Commercial and Meteorologi-	
		cal ...	... 447

EDITORIAL NOTES

We are advised that Mr. J. O. Robinson of Messrs. Spencer and
The Mercantile Bank Company, Limited, has been appointed a Director of
the Mercantile Bank of India, Limited.

We are advised by the Honorary Secretary for Rugger, Madras
The Madras Rugger Tournament Gymkhana Club, that Bangalore Gymkhana, Bombay,
Calcutta, Ceylon, Madras Gymkhana, the Lancashire Fusiliers, the Planters and the Welsh Regiment (who won the
Tournament in Calcutta last year) are regarded as eight
certain entrants for the Madras Gymkhana Rugby Football Tournament to
be held at the beginning of October next. Our Readers will be glad to note
that amongst the 'possibles' is a Naval team from Ceylon. The Final has
been fixed for Saturday, October 9, and, if entries are sufficiently numerous,
it may be necessary to commence the Tournament as early as Saturday,
October 2. As was already announced by Mr. Fulcher on page 352 of our
issue of May 29, there is every possibility of a Madras Presidency team
proceeding to Ceylon at the end of October and playing probably three
matches—*vs.* Low country at Colombo, *vs.* Up country at Kandy and *vs.*
Ceylon at Colombo—in response to an invitation from the Rugby Football
Union of Ceylon.

Our South Coorg Honorary Correspondent informs us that it is
The Bamboo Club proposed to hold an American Handicap (All play all)
Billiard Tournament under the auspices of the South Coorg
Bamboo Club early this month. The games will be 150 Up.

Sir Ronald Ross's recent visit to Ceylon has produced speedy results for the Ceylon Association in London has cabled the Ceylon Estates Proprietary Association saying that it strongly supports the proposal that one or two Malaria logists independent of Government control should be appointed from funds to be raised by a cess of 4 as. per cultivated area on a minimum of 200,000 acres in the low country under Cocoanuts, Rubber and Tea. The Ceylon Association intimates that it is circularizing Proprietary Interests in London; and asks the Ceylon Estates Proprietary Association, in consultation with the Planters' Association and the Low-Country Product Association, to take similar steps in Ceylon.

Rumours regarding gigantic yields obtained from Budded rubber in the Dutch East Indies are rife once more. Mr. C. E. A. Dias, in an address at a recent meeting of the Kalutara Planters' Association, stated that a friend of his in Sumatra was obtaining 1,760 lbs. per acre (120 trees) per annum, and confidently expected that the production would reach 3,000 lbs when the rubber was 10 to 12 years old. He further said that a gentleman who travelled back with him from Europe in 1922 stated that the General Rubber Company, of whose Sumatran estates he was in charge, was about to plant up 50,000 acres in Budded rubber and expected a yield equal to that obtainable from 200,000 acres planted with seed collected *en masse*. Mr. Dias also drew attention to a letter recently published in *The Times of Ceylon* from Mr. C. C. F. Crowther, in which he stated that he had budded over 5,000 acres in Sumatra and was procuring an average annual yield of 2,000 lbs. He went on to give details of the satisfactory essays in budding which he himself had been making on his Milleniya Estate; deprecating planting in the nursery, and strongly advocating planting in the field. From another source we learn that the Chairman of the Kalutara Planters' Association is proceeding to Sumatra to investigate the whole matter for himself; and that the Pussellawa Planters' Association has passed a resolution asking for the despatch of a delegate under the auspices of the Ceylon Rubber Research Scheme. It may be remembered that Mr. Ashplant, when visiting the Dutch East Indies in 1924, failed to find confirmation of the rumours which then too were current regarding yields of the dimensions mentioned above; and indeed the H.A.P.M.'s records pointed to a far more modest figure in the vicinity of 500 lbs. Those who wish to pursue the subject in detail would do well, if they have not already done so, to purchase Mr. Ashplant's exhaustive treatise on the subject which is embodied in 'Recent Developments in the Rubber Planting Industry' obtainable from the Secretary, U.P.A.S.I., Post Box 155, Madras, at Re. 1 post free.

Mr. T. Petch, the first Director of the Tea Research Institute of Ceylon, gave the Knuckles Planters' Association, at a meeting held last month, some interesting details regarding the manner in which the organization of the scheme was being carried on. Temporary laboratories were being opened at Newara Eliya; but the permanent laboratories would be erected at an elevation of 4,000 ft. on the Estate which it was proposed to buy. Jungle land would also be purchased, and devoted to planting up from selected seeds. In addition to the Director, a Chemist (for the investigation of tea manufacture and withering), a Mycologist and an Entomologist have already been appointed; and it is proposed to obtain the services of another Chemist (for the investigation of soils and manures) and a Botanist who will study the effect of pruning on root growth,

OURSELVES

On page 937 of our issue of December 26, 1925, we summarized down to that date the history of *The Planters' Chronicle* from September 1906 when Volume I, No. 1, appeared. With this issue the Paper enters on yet another stage in its career; for it commences the second year of its publication at Madras, where it was produced for the first time on July 4, 1925.

On that date too began the present Editorial connection with *The Chronicle*, and so for us ourselves the present occasion is significant in a peculiarly special way. Its import, in other words, is personal as well as impersonal: it is the anniversary not only of a change of location but also of a change of personnel.

The former change was undoubtedly all to the good. Obviously *The Planters' Chronicle* is a Paper which can be most conveniently, economically and effectively edited from Madras and from the Head Office of the U. P. A. S. I. It is the Official Organ of that Association; and its pages should therefore, in case of need, be available for Official announcements up to the latest possible moment before it goes to Press. It should also, in fairness to the Editor, have access to the Association's Statistical Records, Library and Reports. It should preferably be printed by a more expert publisher than can ordinarily be found in moffussil towns; (and, in this connection, we would like to acknowledge the very satisfactory way in which it is now being 'assembled' and turned out each week by the Diocesan Press). It should—if it is to 'carry' a satisfactory amount of advertising—have its Office in the vicinity of the big 'Madras Agency Firms'. By the transfer from Coimbatore to Madras these desiderata have been achieved.

The other change, however, was unfortunately by no means so beneficial in its effects. It involved the termination of Mr. Edwin Vincent's Editorship of six and a half years' during which he so successfully achieved the ideals he had outlined in a Leading Article on August 23, 1919. Mr. Vincent was a striking success as an Editor at Coimbatore, and surmounted in an exceptionally capable way all the difficulties inherent in that milieu: especially after June 1925 when the U.P.A.S.I. Office migrated to Madras. A fortiori it goes without saying that if he had had at his command the advantages indicated above as appertaining to Madras he would—well, in all probability, have set the Coom on fire.

Comparisons are invidious; but we may say that there is no danger of any such conflagration under the present regime; and indeed there would not be, even if the aforesaid Coom were to become even still less of a river and still more of a dungmeer. We can only hope in the interests of our Readers that the special facilities available here will, to some extent, offset the handicap under which THE CHRONICLE has been labouring since Mr. Edwin Vincent resigned.

When all is said and done, however, the success of such a Paper as THE CHRONICLE depends quite as much upon its Honorary Correspondents as upon its Editor, and we gladly take this opportunity of acknowledging in all sincerity our deep debt to the various Contributors who have during the past year sent us Scientific Articles, Meeting Minutes, and Sports Club News; and who have even on occasion burst into song. We feel confident we may rely on similar support during the next twelve months. A few more words. We would be truly grateful for, and in no wise resentful of, criticism: whether it takes a destructive or constructive form. We cannot,

of course, undertake to adopt all the suggestions of individual Correspondents whose particular interests it will be readily understood must necessarily be subordinated to the general interests of our Readers as a whole ; but we can and do guarantee that the very fullest consideration will be given to letters pointing out instances where we have done those things which we ought not to have done and left undone those things which we ought to have done.

DISTRICT ASSOCIATION MEETING

NILGIRI PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Annual General Meeting held in the Coonoor Club
on Thursday, June 3, 1926, at 11 a.m.

Present

A. K. W. Downing (*Chairman*), Col. L. L. Porter, Messrs. R. N. C. Grove, Percy Reed, H. G. Cotton, W. A. Cherry, C. L. Greig, J. Backhouse, Capt. Robert F. Bryant, J. Erskine, R. L. Stuart, C. St. John Ives, P. V. Cherrian, H. S. Cameron, E. E. Fennell, G. W. Hollings, Capt. E. G. Windle, L. F. Lake, Col. W. Ward, and C. W. Hayne (*Honorary Secretary*).

Visitors

Mr. D. G. Munro, Dr. W. S. Shaw, and the Assistant Traffic Superintendent, S.I.R., Coonoor.

Proceedings

Before commencing the business of the meeting, the Chairman said : ' It is my sad duty to have to refer to the death of Mr. Clayton Daubeney. Mr. Daubeney had not been long amongst us, but in that time had shown himself a keen planter and sportsman. In fact, as last year's District Representative, he was in a great measure responsible for the success attending Planters' "Week" '.

We shall miss him at our meetings, and also on the cricket field ; his last illness was brought on by a chill after playing in the game he loved so well.

I now ask you to pass a vote of sympathy with Mrs. Daubeney and her family in their sad loss. Passed all standing.'

Notice calling the meeting for May 20 was read, also the postponement to June 3.

Minutes of previous meeting were taken as read and confirmed.

Acreages and Subscriptions. The Honorary Secretary asked the meeting if this Association was held responsible to the U. P. A. S. I. for non-payment of the Scientific Department subscriptions ; giving instance of a certain Estate. The N. P. A. subscription of this Estate was paid without demur, but scientific cess was deliberately refused. The Honorary Secretary stated that the para refusing payment of scientific cess was forwarded at once to the Secretary, U. P. A. S. I. The Honorary Secretary was instructed to get a definite ruling on this matter from the U. P. A. S. I.

Auditor. The appointment of Mr. H. L. Morris and Mr. Naranayaier as Auditors at the same remuneration for N. P. A. accounts, in place of Mr. Siromani (deceased), was confirmed.

Accounts. These were passed round for scrutiny.

Proposed from the Chair:

That the duly audited accounts be adopted and passed.

Carried.

The Chairman's Address

GENTLEMEN,

Your Honorary Secretary's report will cover all the activities of the association during the past year, so I will not keep you long, but just touch on a few items.

Tea. Crops have been good and, though prices tended to drop for the first six months of the year, they recovered later; and I do not think with present prices, notwithstanding the comparatively high exchange, we have any cause for complaint. They are at what I might term a useful level for all concerned, both producer and consumer; and if producers keep to the slogan of 'quality first' we have good years ahead.

Coffee. Crops have been average and prices good; with every likelihood of more than average crops this year. As most places have had favourable weather, one can only hope for a continuance of good prices.

Rubber. We have very little (comparatively speaking) in this district, but where tapping has been done I believe outturns have been good, and I trust prices will keep at a satisfactory level.

Roads and Communications. Without good communications any industry is severely handicapped, and I consider our district roads are now more than feeling the burden they have to carry, and some scheme will have to be considered, in the immediate future, to enable more funds being available for upkeep (for though the most is now done that can be, with the present allotments, still it is quite insufficient for the repairs needed under present traffic conditions): otherwise if the matter is delayed too long our roads will deteriorate to such an extent it will be impossible to get the large sums required for what will practically amount to re-making; the old saying 'A stitch in time' is very applicable at the present juncture.

Telephones. The Departments concerned were very anxious to connect Kotagiri with the Coonoor Exchange, but I hear that on enquiries being made by them the probable number of subscribers was not sufficient to justify the initial expense of the line. I consider it a great pity that more had not come forward, as I feel certain it would be found of the greatest utility; and though at present subscribers could only get through to Coonoor, Wellington and Ooty, there are far larger possibilities which the Department would like to develop, provided they find the present telephone system on these Hills receives the support it deserves. I would ask residents of Kotagiri and adjacent parts to reconsider the question, and try and procure sufficient subscribers so that at least a Public Call office may be opened there. As regards the 'phone connections to the Western part of the district, this will come up before us to-day.

Extension of Kateri Road Goods Shed. The Assistant Traffic Superintendent is here to-day, and has promised to give us the latest news and regards this.

Pykara Hydro-electric Scheme. We must congratulate the Government in that they have at last started a scheme for the utilization of some of the power that is running to waste off these Hills, and hope that when completed cheap power may be made available to all.

Sports Club. There are still many of the younger members of this Association who have not joined: I hope to see many more names on the list this year, for I consider that every one should join, and turn up in full force at 'Planters' Week.' I know that if you once attend one of these 'Weeks' you will never miss another; but become a regular and enthusiastic supporter.

S. I. P. B. Fund. This deserving fund requires and should get far more support than it does; and I hope that when this year's figures for this district are published, it will make a better show than those just printed in the *Planters' Chronicle*.

In conclusion I wish to thank the Honorary Secretary for the unselfish and untiring manner in which he has carried out his work during the past year, and you Gentlemen for having done me the honour of electing me as your Chairman.

I now beg to place my resignation, as well as that of my Committee in your hands.

The Honorary Secretary's Ninth Annual Report

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to bring before you my annual report for the year ending March 31, 1926.

Meetings. These have generally been held quarterly.

Attendance. This has been, on an average, 14 members: the highest being 18 at one meeting. I notice that the Kotagiri side has been very poorly represented during this last year; only one or two members being present at each meeting.

Membership. We have added another member to our list in the way of the Waterfall Estate, but we have lost Kairbetta Estate since my last report. As regards personal members, we have added five to our list, and lost none.

Disafforestation of land. This subject was brought up at our last Annual General Meeting and all plans and maps were sent in, but so far no further communications have come to hand from the higher authorities. However I hope we shall hear shortly what developments have taken place.

St. George's Homes. At the last Annual General Meeting member volunteered to send a certain amount of tea free to these Homes, and I think all that was promised has been sent.

Telephones. Last year telephones had hardly been thought of and no much discussed. This year they have not only been discussed, but two or three installations have been put in and others are in the offing.

Roads and Communications, Kallur Bridge. At last this bridge looks somewhere near completion. It's been a case of slow but sure. May the suggestion of the Coonoor Kotagiri-Mettapalayam road being turned into a trunk road become a fact in a shorter time.

Weather. This deserves some comment. Ooty seems to have had all the rain, but Kullakamby district seems to have been forgotten. It is certainly the longest hottest spell of dry weather that has been experienced in this district.

Labour. I think this has been sufficient to plentiful.

Auditor. I put the names of Mr. Narayanaier and Mr. H. L. Morris before the Committee by post and obtained their sanction to have the account audited by them in place of Mr. Siromani (deceased).

Accounts. These have been audited and passed. I lay them before you. I am sorry to say there are more outstandings than last year. However I hope to get them all in shortly. I should like to say in passing that those subscribing to the Association have to pay their subscriptions sooner or later. Why not sooner than later, and save the Honorary Secretary having to send reminders out!

Before closing, Gentlemen, I should like to pass a vote of thanks to our Planting Member for what he has done for us this past year, and hope he will see his way to continue to be our Planting Member.

In conclusion, I thank you once again one and all very heartily for your thought at the time of my wedding (a thought much appreciated by both my wife and myself) and also for the token which supplemented the thought. I also thank you for the honour of having re-elected me last year as Honorary Secretary. Now, as this brings me to the close of my term of office, I herewith tender you my resignation.

Roads and Communications. Proposed by Capt. Windle and seconded by Col. Porter that the paragraph relating to Roads and Communications in the Chairman's address be sent as a resolution to the President of the District Board.

Carried.

Proposed by Col. Porter and seconded by Col. Ward that the P. W. D. be asked what steps they intend taking to prevent further slipping at the Kartary Toll Gate corner, as the Estates situated in the Kullakamby and Hulicul Districts view with great apprehension the results likely to occur during the next N.-E. monsoon; as the Coonoor-Mettapalayam ghat road, the sole means of approach to the Nilgiris, was of the most vital importance during the now usual long periods in which the Railway is out of action.

Carried.

Read letter from Mr. Lake with reference to the Katary-Pilloor road. After the resolution that had been passed on 'communications', he wished his letter to be withdrawn.

Read letter from Mr. St. John Ives, with reference to a notice issued by the President, District Board, stopping the running of lorries on certain roads in the district. The Honorary Secretary was instructed to obtain a copy of Section 165, Madras Local Board Act, and place same before the next meeting.

Kateri Road Goods Shed. The Assistant Traffic Superintendent, Coonoor, explained the present situation, and placed certain facts and figures before the meeting, after some discussion it was decided that these be embodied in a letter to be sent to the Honorary Secretary for consideration at a future meeting. A vote of thanks was passed to the A. T. S. for his trouble in preparing plans, etc.

Telephone Connections. The Chairman gave the following information : On May 6, 1926, he received a letter from the Divisional Engineer Telegraphs, dated May 3, giving the yearly rental that would be charged to certain estates who had applied for connections to be put in ; and that contract forms would be sent to those who agreed to these. Acting on this he circularized these estates on May 7, and received replies from four estates, asking for contract forms to be sent them ; applications for these were sent in at once ; a letter dated May 17 was then received from the D. E. Telegraphs, asking that his letter of May 3 be held in abeyance ; to which the Chairman replied that estates had already been informed, and that applications from four had been sent in, and asked for further information ; in reply to this the D. E. Telegraphs wrote under date June 2 to the effect that the estimates were being revised, and as soon as the revised costs are known the yearly rental charges will be intimated. In the meantime he was watching the interests of those estates concerned.

Scientific Department. The Chairman extended a hearty welcome to Mr. Munro and Dr. Shaw, on behalf of the Association ; and hoped that, when the latter had got the Tea Experimental Station going, he would have the hearty co-operation of all tea members. They could help to make the station the success and consequent help it should be to the tea industry, by bringing field and factory conditions to him so that science could be helped, and results obtained as quickly as possible. Mr. Munro, replied on their behalf, thanking members for the hospitality extended to them during their tour, and assuring them it was their one aim to further the prospects, as far as they could, of the Planting Industries of South India. (*Applause*).

Miscellaneous Correspondence. Read letter from the Principal, St. George's Homes, with reference to the giving of 300 lbs. tea to these Homes. He hoped the Association would continue its gift. Decided that the Honorary Secretary write round asking for names of members who would be willing to come forward again this year. Another question was asked in connection with these Homes. A resolution was passed some two or three years ago that a donation of Rs. 120 should be sent yearly from this Association, but on an objection being raised by the previous auditor, the matter was put before this meeting and it was decided to discontinue this donation and ask members if they would be willing to make good this donation from amongst themselves.

Read letter from Mr. J. B. Vernede stating his inability to be present at this meeting.

Letter from Director, Posts and Telegraphs, No. 753 E, 25, dated January 25, 1926, was recorded.

Letters from the Director, Labour Department, with reference to 'Terms of Employment of European Employees' and 'Indian Employees Provident Fund' were recorded.

A very hearty vote of thanks was passed to the retiring Honorary Secretary for all the good work he had put in on behalf of the Association, not only during the past year, but in the whole three years of his Honorary Secretaryship.

Capt. Windle then took the Chair, and proposed a vote of thanks to the retiring Chairman, for his work for the Association in the past year, also that he be re-elected for the current year.

Carried nem. con.

The Chairman, replied thanking Capt. Windle and the meeting and adding that they might count on him to do his best to further the interests of the Association.

Office-bearers. The election of office-bearers for 1926-27 then took place, with the following results:—

A. K. W. Downing :	<i>Chairman.</i>
G. W. Hollings :	<i>Honorary Secretary.</i>
Capt. E. G. Windle }	<i>Committee.</i>
Col. W. Ward }	
R. N. G. Grove }	
H. S. Cameron }	
C. L. Greig }	
Percy Reed }	<i>U. P. A. S. I.</i>
G. W. Hollings }	<i>General Committee.</i>
A. K. W. Downing }	<i>Delegates for Bangalore.</i>
G. W. Hollings }	

With votes of thanks to the Chair, and to the Honorary Secretary, Coonoor Club for the use of the room, the meeting terminated.

CHRIS W. HAYNE,
Honorary Secretary, N. P. A.

A. K. WELD DOWNING,
Chairman.

U.P.A.S.I., SPORTS CLUB

VENUE OF MEET FOR 1927

Will all Delegates to the Bangalore Meeting in August kindly bring instructions from Members in their Districts regarding the following resolution passed at the Annual General Meeting of the Kanan Devan's Association on May 1, 1926.

'That the venue of Planters "Week"
'be changed from Ooty to Coonoor.'

The month of March is likely to be chosen for the Meet next year.

DEVARSHOLA P. O.,
June 28, 1926.

G. W. FULCHER,
Honorary Secretary.

COFFEE

EMPIRE SOURCES OF SUPPLY

BY
ALFRED S. BOOTH

In Great Britain comparatively few, apart from those interested in its productions and manipulation, realize the importance of coffee as an article of commerce. The great majority of the inhabitants of Great Britain and Ireland if asked whether tea or coffee is the more important, would at once answer, 'Tea,' while if a similar question were put to citizens of the United States they would at once unhesitatingly reply, 'Coffee.' The reason for this difference of opinion is not far to seek. In this country the consumption of coffee is only equivalent to $\frac{3}{4}$ lb. per head per annum, while in the United States it is no less than 12 lb.

Although the consumption of coffee per head in this country is so small, it is worth noting that the proportion of the finer qualities used is greater than in any other country. During the last 35 to 40 years much greater care has been taken to ensure that coffee should be delivered to the customer freshly roasted and freshly ground, and since the end of the war it is gratifying to be able to record a substantial advance in home consumption. Before the war Great Britain's annual consumption, as judged by duty-paid deliveries, was 13,000 tons; to-day these duty-paid deliveries are 17,000 tons, and the tendency is still upwards.

On the other hand, the consumption of tea in Great Britain and Ireland is equivalent to 9 lb. per head per annum, while in the United States it is less than 1 lb.

Further, the annual production of coffee reaches the astounding total of 28,000,000 cwt., whereas that of tea is 800,395,723 lb. (say, 7,146,390 cwt.).

Of this enormous quantity of coffee about 70 per cent comes from Brazil, and the remaining 30 per cent from Central America, Colombia, Venezuela, Java, and Sumatra, the West Indian Islands, other than British, the East Indies, East Africa, Jamaica, etc.

Of these countries, India, East Africa, and Jamaica are the only British Empire sources of supply of any importance. At one time Ceylon was an important coffee-growing country; in 1869 and 1870 over 1,000,000 cwt. were shipped from this Colony each year, and the coffee was mainly of good quality. Then in the early seventies the leaf disease (*Hemileia Vastatrix*) attacked the coffee trees, and within a few years the coffee industry of Ceylon was a thing of the past. At the present time no coffee whatever is produced in the island.

BLOSSOM TIME

In India, happily, the industry has escaped such wholesale destruction, but, as in all coffee-growing countries, the planter has always to be on the watch for insect pests; success is the 'reward of constant vigilance.' The quantity available for export, of course, varies year by year, and is dependent on the weather conditions during the blossoming and setting seasons, and the following six months or more that elapse before the berry is ready for picking—a time in which many things may happen. The blossoming takes place immediately after the heavy rains, which in India come about the end of March, but the time varies in different countries.

(To be concluded next week)

THE TEA INDUSTRY

IN THE
NILGIRIS

(Concluded from page 431 issue of June 26, 1926)

The plants obtained by Bentinck from China were sent to the experimental farm at Lovedale, but it was at once apparent to M. Perrottet, a French Botanist who came out to Pondicherry that they had not received the best treatment. He found the gardeners had half buried them in the ground and they were, as a consequence in a bad state. The buildings which had been erected for the use of the experimental farm were lent to the Governor of Pondicherry as a residence, and during his period of living there the French Botanist referred to, devoted much time and thought to the problem of growing tea in the neighbourhood. The plants were uncovered and all care taken of them. In two years' time the plants had developed splendidly and there were both fruit and healthy young leaves to be found on them. In one of the issues of the *Fort St. George Gazette* he published an account of his successful experiments which quickly attracted attention. Steps were taken to collect samples of the tea grown. In spite of the very primitive way in which the leaves had to be treated the results were pronounced to be very favourable, and of such quality as to justify a more extensive cultivation of the plant.

EARLY ADVENTURES

Encouraged by his successful experiments on the hills at Coonoor. Mr. Mann decided to make further experiments and with this aim in view he invested in a good supply from the finest plantations of China early in 1854. The Coonoor estate was then formed and after overcoming several difficulties the land was planted and good crops resulted. The London brokers spoke favourably of the new tea. But, alas! the difficulties of tea-growing on the Nilgiris were not easily overcome and Mr. Mann had soon to give up his cultivation. Noticing how well the trees were spreading Dr. Cleghorn, Conservator of Forests, induced the Government to consider the proposal of taking up the work. His efforts met with a somewhat withering reply from the then Governor of Madras, who deprecated the habit of depending on the Government for those things which ought to be done by individuals. In the nineties Mr. Rae commenced planting on the Kotagiri side where to-day there is some of the finest tea grown. When Sir William Denson held the office of Governor of Madras he did his utmost toward the improvement of the tea cultivation. He ordered large quantities of seed from the best planters in the North-West Provinces and gave it to the Nilgiri planters. Though the Government showed its sympathy their efforts cannot be said to have proved very helpful to the industry. It was left to the planters to continue their experiments and work out the most satisfactory methods by which the plant could be grown in the district. How well they have succeeded can be easily seen on a visit to the plantation to be found in the vicinity of Coonoor and Kotagiri. There is a steady increasing demand for Nilgiri tea, and several gardens there are well known in the British market. The planters are desirous of developing on Indian trade equal to that of coffee as this will save them from heavy demands of the middleman and the customs which have now to be paid. There is a growing demand in India for tea though as yet the demand does not compare with that for coffee in the South.

THE THREE VARIETIES

A visitor to the Nilgiri Hills can easily make a short excursion to one of the estates of which the managers are very willing to explain the working of the estate. As these are often situated in lovely parts of the districts this aspect of the excursion will more than repay the visitor. Unlike coffee, tea does not require shade but grows on the open hill side, the bushes being planted a few feet apart. Three varieties are largely grown, the China tea, which is a hardy plant; the indigenous Assam sort which in its natural habitat grows to a height of twenty-five feet; and the hybrid, between these two, which is found to be the most successful of the three. It is said to produce twice as much leaf as the pure China, and yet possesses a great measure of its hardiness. The plant is small, and the leaves are known by particular technical names. The names of pekoe, souchong, etc., are well known to buyers and drinkers of tea; but the majority of people have the idea that each name refers to a different species of tree, whereas all kinds grow on the single tree. The bud at the extreme end, the youngest leaf, is known as flowery pekoe; the next two, and largest, congou. Some planters pick the bud and the first two leaves separately; but generally all the leaves are plucked when there is a burst of green leaf by the women and the children. The sifting is done afterwards. As soon as they are plucked they are despatched to the factory and the process of curing begins. It is necessary for each planter to have a certain amount of machinery on the premises as it is not possible to despatch to any distance without first treating the leaf. In this respect the coffee grower has the advantage over the tea planter.

The Pioneer

W H Y?

BY

G. KEEWAY

Deserted! Only those who have enjoyed the full amenities of social life can realize the mental agony caused by such a situation as confronted Seekoe.

His so-called friends of yesterday had left him in complete isolation.

As if by some pre-arrangement, they gave the club a wide berth, so that even there the desired companionship was denied to him.

His nights now became a torment. Even when sleep did come, nightmares prevented that restful repose which was now so necessary to him.

Haggard and wild-eyed, he would attend muster at 6 a. m. : an unprecedented happening. Here, his disturbed state of mind appeared to affect the coolies. In astonishment they noted his continued presence in the fields. To him, the extra work came as a relief. He would now crowd two days work into one, and leave his office work for his evening occupation. Any subterfuge would now be adopted in the attempt to prevent his mind from dwelling upon his hidden secret.

In a few days more it would be revealed to the world: nothing could prevent it. Bribery, cajollery, even threats, were useless.

His old-time friends, what would they say and think?

In spite of the coming disclosures, that indomitable spirit which had characterized him through his career now stood him in good stead.

He steadfastly refused to consider the possibility of Escape. He would face the music, and square his shoulders to the ordeal in front of him.

THE V. A. WAS COMING ON THE MORROW.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending June 26, 1926

Bank Selling Demand Draft on London

21st	22nd	23rd	24th	25th	26th
Holiday	17 29/32d.	17 29/32d.	17 29/32d.	17 7/8d.	17 7/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending May 22, 1926	January 1 to May 22, 1926	January 1 to May 22, 1925
				s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING MAY 22, 1926)			N. India.	1 8·05	1 9·14	1 5·90
			S. India	**1 9·16	††1 9·69	††1 6·41
			Ceylon...	1 10·01	1 10·46	1 8·27
(a) Anamalais—			Java ...	1 5·54	1 5·53	1 1·07
Thaymudi ...	223	1 10½	Sumatra.	1 6·07	1 7·59	1 4·42
Thonimudi ...	332	1 10¼	Nyassa- land.	1 2·83	1 6·45	1 2·82
Periakaramalai ...	247	1 9¾	Total ...	*1 8·38	†1 9·21	†1 6·10
Kallyar ...	182	1 9¾	(B) COFFEE			
Naduar ...	177	1 9¾	London Prices (seven days ending June 8, 1926)			
(b) Central Travancore.						
Stagbrook ...	132	1 9¼	(a) Coorg—	bgs.	s. d.	Grades.
Glenmary ...	131	1 9¼	Mylatpur ...	18	134 8	1,2,3, 'P R' & 'T.'
Bon Ami ...	85	1 9¼	Corringabetta.	73	134 7	Do.
Munjamullay ...	110	1 8¾	(b) Mysore—			
(c) Coorg—			Olivers K. ...	92	154 9	Do.
Glenlorna ...	194	1 7¾	Mysore X. Q.	109	151 6	1,2,3, & 'PB'
(d) Kanan Devans—			Sallebile ...	128	139 2	1,2,3, 'PB' & 'T.'
Vagavurrai ...	113	1 9¼	(C) RUBBER			
Talliar ...	70	1 8	The London 'Spot' quotation for Plantation first Latex Crepe on Tues- day, June 29, 1926, was 20¼ d.			
Chattamanaar ...	95	1 7½				
(e) Mundakayam—						
Yendayar ...	60	1 8¾				
(f) Nilgiris—						
Prospect ...	330	2 1¾				
Nonsuch ...	126	1 11½				
Ibex Lodge ...	88	1 10½				
Bhawani ...	85	1 10½				
(g) Nilgiri-Wynaad—						
Seaforth ...	160	1 9¼				
Woodbriar ...	74	1 9				
(h) South Travancore—						
Poonmudi ...	126	1 8				
Merchiston ...	93	1 7¾				
(i) Wynaad—						
Chulika ...	65	1 7½				
Erramaculla ...	114	1 7				
Elstone ...	86	1 6½				

** Based on 6,450 packages.

†† " " 66,281 "

†† " " 72,107 "

* Based on 78,353 packages.

† " " 1,253,711 "

† " " 1,055,820 "

(b) *Précis of Reports on the London Market received on Monday, June 28, and covering the seven days ending Tuesday, June 8 :—*

(1) *Tea.*—We have to postpone until next week our selection from the best prices obtained at the auctions held during the week ending Saturday, June 5; as the Tea Brokers' Association's Report for that week did not come to hand by this Mail. We are advised, however, that between 48,000 and 49,000 packages were offered and met with a keen demand: especially the common to medium grades which registered an advance of about $\frac{1}{4}$ d. per lb.

(2) *Rubber.*—During the seven days under review stocks increased by 706 tons to 20,883 tons, while the spot price remained in the region of 1s. 8d. Very little business, however, was done; but to quote Messrs. Sanderson & Co., it is more or less proveable that manufacturers are working on skeleton stocks, and will sooner or later find themselves short of supplies and be compelled to come into the market regardless of price. The extent to which consumers have covered their probable requirements by forward buyings will of course largely determine the exact time at which some such favourable development is likely to occur.

(3) *Coffee.*—In view of the continued export demand, the coffee offered in auction during the seven days under review met with a very firm market; and Mysore especially were eagerly sought. On June 5, stocks in London of African, Indian, and other kinds respectively were given (in bags) as 37,553, 17,269 and 119,320; as compared with 38,389, 39,817, and 128,695 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, June 20, 1926, to Saturday, June 26, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	0.71	23.41	24.12	19. Naduvattam	1.50	7.36	8.86
2. Kalthuritty.	8.85	27.23	36.08	20. Coonoor ...	0.06	4.26	4.32
3. Tenmalai ...	7.30	29.85	37.15	21. Kotagiri ...	0.37	6.57	6.94
4. Mundakayam.	7.34	25.95	33.29	22. Ootacamund	1.41	12.25	13.66
5. Peermade...	5.11	31.81	36.92	23. Yercaud ...	0.79	14.95	15.74
6. Twyford ...	7.56	35.60	43.16	24. Devala ...	6.53	14.45	20.98
7. V'periyar...	1.40	13.65	15.05	25. Gudalur ...	N.R.	7.31	N.R.
8. Kalaar ...	3.13	29.52	32.65	26. CALICUT ...	5.95	25.15	31.10
9. Chittuvurrai	0.86	11.52	12.38	27. Kuttiyadi ...	5.00	26.38	31.38
10. BODI'KANUR	...	3.55	3.55	28. Vayittiri ...	1.90	21.27	23.17
11. COCHIN ...	8.33	35.09	43.42	29. Manantoddi.	1.65	10.03	11.68
12. Mooply Valley.	6.36	28.74	35.10	30. Billigiris ...	2.24	7.35	9.59
13. Pachaimalai	4.05	17.76	21.81	31. Sidapur ...	0.25	12.73	12.98
14. Mudis ...	8.66	31.79	40.45	32. Pollibetta...	1.25	10.35	11.60
15. Nell'pathy...	1.67	9.80	11.47	33. Somwarpett	N.R.	5.18	N.R.
16. POLLACHIE.	0.02	5.27	5.29	34. Ballupete ...	0.10	5.53	5.63
17. Manjeri ...	1.76	21.49	23.25	35. MANGALORE.	3.80	22.52	26.32
18. Nilambur ...	3.36	13.34	16.70	36. MADRAS ...	...	0.60	0.60

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 28] SAT., JULY 10, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 449	Coffee Empire Sources of	
Rubber Specialist's Circular		Supply ...	... 462
No. 3—		Exports from S. I. of Coffee,	
Secondary leaf fall disease.	451	Rubber and Tea...	... 464
U.P.A.S.C. Notice—		Commercial and Meteorologi-	
Cricket and Rugger in Madras	462	cal ...	... 465

EDITORIAL NOTES

Those who dabble to even the smallest extent in Writing—albeit only the drawing up of a diplomatically worded *non possumus* in reply to the periodical importunities of their tailors and others of that ilk—sooner or later find themselves in the unpleasant position of being unable to recall a word which they know quite well is lurking in the depths of their unconscious mind; and which they know equally well would, if only it could be induced to come out into the open, prove to be the just right word in the right place. Dictionaries only increase the dilemma by showing that synonyms are not indiscriminately interchangeable; and, in certain contexts, may connote very different meanings indeed. This moral is also pointed by an anecdote about Sir W. S. Gilbert of operatic fame. He was accustomed to present his great friend George Boughton, R.A., the famous painter, with 'first night' tickets for the Gilbert-Sullivan productions; and after one such occasion Boughton sent him the following letter of thanks:—'Dear Gilbert, Very many thanks for the ticket you so kindly sent me for last night. I like the play immensely, but not its name. Why "Ruddy Gore"? Why not "Bloody Gore"? Yours sincerely, G. Boughton.'

Back came the prompt reply:—'Dear Boughton, If I said "I admire your ruddy cheek", you would doubtless take it as a compliment; but if I said "I like your b——y cheek", you would probably be very annoyed. Yours sincerely, W. S. Gilbert.'

Viscount Willingdon's admirers in India and in the Madras and Bombay Presidencies especially will hope that, before his assumption of the Governor-Generalship, the forthcoming General Election in Canada will have given some one Party a definite working majority, and thus determined the political stalemate which has hampered the efforts of the Administration during the current year. The General Election held last October gave the Conservatives, Liberals, Progressives (i. e. the Farmers), Labourites

and Independents, respectively 117, 100, 25, 2, and 1 seats ; so that since then the Liberals have been a minority Government, with a possible maximum majority of 11 over the Conservative Opposition when Progressives, Labourites, and Independents gave them (the Liberals) their unanimous support. It will be remembered that when the Liberals fell last week over the debate on the irregularities in the Customs Administration ; the present Governor-General, Lord Byng of Vimy, raised a rather fine constitutional point by refusing the Liberal demand for a dissolution, and summoning Mr. Meighen, the Conservative Leader, whose Cabinet, however, was practically still born ; for in a very small division of only 191 members they could only obtain 95 votes against 96. Thus were falsified at the very outset Mr. Meighen's hopes that the section of the Progressives which follows Mr. Wood—the President of the body known as the United Farmers—would give him its support, because it is distinctly less identified with the Liberal Platform than the other section of the Progressives which owes allegiance to Mr. Forke who is the Party's titular Chief. These two Gentlemen, it would appear, fill roles not entirely dissimilar from those adorned by Mr. Lloyd George and Lord Oxford and Asquith whose dissensions have recently furnished much 'copy' to the English Press. At the General Election in October last the Conservatives, with their policy of protection, did extremely well ; while the Progressives who suffered most lost no less than 36 seats. At the forthcoming election they may do even better ; for if they can obtain a fair proportion of the votes, which, we believe, number 65, from Quebec (which at present is solidly Liberal) they should be in a position to put the Liberal Party *hors de combat* almost as effectively as their *confreeres* did in England in 1924. We do not suppose Lord Willingdon, who is a Liberal, would, in his private capacity—officially, of course, he will be above politics—prefer such a contingency to a Liberal triumph ; but he probably would infinitely prefer it to a perpetuation of the present unsatisfactory state of affairs.

The suggestion, which we made some time ago that those Honorary Secretaries of District Planters' Associations who were in a position to do so might send us in a list of Past Chairmen and Secretaries, has so far only produced responses from Central Travancore and Coorg. With due acknowledgements, however, to the Asylum Press Almanac we are able to publish a list of Honorary Secretaries of the Nilgiri Planters' Association since the year 1892 :—

<i>Name</i>	<i>Years</i>	<i>Term of Office</i>	<i>Name</i>	<i>Years</i>	<i>Term of Office</i>
Capt. T. Fuller	1892-93	6 months.	S. Nicolls	1912-14	3 years.
W. L. Edmiston	1893-97	3 years, 10 months.	G. W. Church	1914	1 year.
E. G. Windle	1897-99	2 years, 10 months.	L. A. Gerrard	1915-16	2 years.
W. C. Deane	1899-1900	10 months.	J. B. Leslie	1917	1 year.
R. Buchanan	1900-1	1 year, 3 months.	Rogers.		
J. Liebenrood	1901-2	1 year, 6 months.	G. F. Weston	1918	"
C. H. Brock	1902-8	6 years, 1 month.	Elwes.		
Frank Cockburn (Ag.)	1908-9	10 months.	Weld Downing	1919	"
E. F. Barber	1909-10	1 year, 9 months.	A. N. Hearn	1920	"
L. L. Porter	1910-12	1 year, 3 months.	F. H. Farmer	1921	"
			C. W. Hayne	1922-26	4 years.
			G. W. Hollings	1926	

American Tea Market Sir Charles Higham, before sailing for London on the conclusion of his visit to the U.S.A. in connection with the publicity campaign of the Indian Tea Association, informed the San Francisco Correspondent of *The Times* that he considered the money sunk in advertising Indian tea in America had already had most satisfactory results; in that the United States consumption had increased by 13 million pounds during the past two years. Furthermore he felt that the results already achieved—satisfactory as they were—were but a fraction of the results which, in the future, he confidently expected to attain. The Americans at present 'guzzle' coffee instead of like the English drinking tea; but Sir Charles claims that his slogan 'Drink more tea' is now, through his newspaper advertisements, reaching 50 million people or almost half the total population of the States every week. When it is remembered that the per caput consumptions of America and the United Kingdom respectively are about .9 lb. and 9 lbs. it will be realized that the possibilities of the Indian Tea Association's intensive campaign are infinitely great. In this connection we may mention that the Indian Tea Association at its 45th Annual General Meeting in Calcutta on March 12 allotted a minimum of £35,000 for propaganda work in the United States during the year ending March 31, 1927.

CIRCULARS OF THE RUBBER SPECIALIST

No. 3:—SECONDARY LEAF FALL DISEASE OF RUBBER

BY

HERBERT ASHPLANT, A. R. C. S., RUBBER
SPECIALIST, U. P. A. S. I.

(Continued from page 430 issue of June 26, 1926.)

E. MINIATURE MANURED PLOTS

As the smallness of the doses of manure applied in the experiments detailed on pages 426 *et seq.* of *The Planters' Chronicle* of June 26, 1926, may excite comment, it should be remarked here that this manuring was done in the darkest days of the rubber slump, when financial stringency and the uncertain outlook regarding further supplies rendered economy necessary. This is one reason for the in many cases homeopathic doses, though not the only one. With rubber selling at seven pence per pound; and with, so far as one could see ahead in those days, no prospect of an economic price for years, one had to take account of the local estates' capacity to pay for a 'cure', if found. The manurial doses in the large plots therefore were designed with the object of discovering the minimum likely to produce an effect. Should any of the trees shows signs of having benefited by the manuring, quantitative trials of the favourable manure to settle the maximum dose applicable with benefit and profit would more conveniently form part of a later scheme.

While in the 1922 experiments none of the trees were given a surfeit of manure, motives of economy did not prevent each manure from being tried out in quantities that might reasonably be held sufficient for producing an effect. In a series of miniature plots nearly all the manures referred to were repeated in larger doses. For fear of weakening the trees, applications of Sodium Nitrate were generally kept moderate, but the phosphates and sulphates specially indicated by theory were applied in largely increased doses in these small plots, up to 4 lbs. phosphate and 3 lbs. sulphate being given per tree. In addition to these duplications, a few small plots were

utilized for the independent trial of certain chemicals to which value as stimulants or as auxiliary fertilizers has been attributed, and some of which, it was thought, might be missing from the soil. A full list of the substances tried, together with the quantities used in these plots is shown below:—

MINIATURE PLOTS TREATED WITH VARIOUS CHEMICALS OR HEAVIER DOSES OF THE ORDINARY MANURES

Plots	No. of Trees	Manure or Chemical applied	Date of application
A	10	1 lb. Sodium Nitrate per tree	9-3-22
B	10	1 lb. Potassium Chloride per tree	"
C	10	1 lb. " Nitrate "	"
D	10	$\frac{1}{2}$ lb. " Chloride and 4 lbs. Basic Slag per tree	"
E	10	1 lb. " Nitrate and 4 lbs. Basic Slag "	"
F	10	$1\frac{1}{2}$ lbs. Sodium Nitrate, $\frac{1}{2}$ lb. Potassium Chloride and 4 lbs. Basic Slag	"
G	10	$1\frac{1}{2}$ lbs. Calcium Nitrate per tree	"
H	10	$1\frac{1}{2}$ lbs. Sod. Nitrate, $\frac{1}{2}$ lb. Pot. Chloride and 2 lbs. Basic Slag	11-3-22
I	10	$\frac{3}{4}$ lb. Am. Nitrate, $\frac{1}{2}$ lb. Pot. Chloride and 4 lbs. Basic Slag... ..	9-3-22
J	10	1 lb. Am. Sulphate and 4 lbs. Basic Slag	"
K	10	4 lbs. Lime, 4 lbs. Basic Slag, 1 lb. Am. Sulphate and $\frac{1}{2}$ lb. Pot. Sulphate	11-3-22
L	10	1 lb. Am. Sulphate	10-3-22
M	10	1 lb. Am. Sulphate and 2 lbs. Basic Slag	11-3-22
N	9	$1\frac{1}{2}$ lbs. Basic Slag, $1\frac{1}{2}$ lbs. Am. Sulphate and $\frac{1}{2}$ lb. Pot. Sulphate	"
O	10	4 lbs. Lime	"
P	8	3 lbs. Super Phosphate	"
Q	10	4 lbs. Basic Slag	"
R	10	Ferrous Sulphate	"
S	10	2 lbs. Basic Slag and $\frac{1}{2}$ lb. Pot. Sulphate	"
T	10	$1\frac{1}{2}$ lbs. " 3 lbs. Am. Sulphate and 1 lb. Pot. Sulphate	"
U	10	$1\frac{1}{2}$ lbs. Basic Slag, 1 lb. Am. Sulphate and 1 lb. Pot. Sulphate	"
V	10	$1\frac{1}{2}$ lbs. Basic Slag, 2 lbs. Am. Sulphate and 2 lbs. Pot. Sulphate	"
Z	10	4 lbs. Basic Slag and $\frac{1}{2}$ lb. Pot. Sulphate	10-3-22
A ₁	10	4 lbs. Basic Slag, $\frac{3}{4}$ lb. Am. Nitrate and $\frac{1}{2}$ lb. Pot. Sulphate	"
B ₁	10	4 lbs. Basic Slag, 1 lb. Am. Sulphate and $\frac{1}{2}$ lb. Pot. Sulphate	"
G ₁	10	3 lbs. Basic Slag, 1 lb. Am. Sulphate and 1 lb. Pot. Sulphate	"
H ₁	10	1 lb. Potassium Sulphate	"
I ₁	10	3 lbs. Basic Slag, 2 lbs. Am. Sulphate and 1 lb. Pot. Chloride	"
J ₁	10	$1\frac{1}{2}$ lbs. Basic Slag, 2 lbs. Am. Sulphate and 1 lb. Pot. Chloride	"
K ₁	10	Pot. Permanganate and Manganese dioxide	13-3-22
L ₁	20	$1/10$ lb. Sulphur	1-6-22
M ₁	25	0.2% Sulphuric acid	"
N ₁	20	0.01% Copper Sulphate	2-6-22
O ₁	15	0.01% Potassium Cyanide	5-6-22
P ₁	10	Lime and Sulphur Mixture	"

F. DIRECT ROOT ABSORPTION OF PURE NUTRITIVE SOLUTIONS

Little of the manure applied by the ordinary methods is taken up by the plant in the form or concentration in which it is administered. The various chemical substances in the soil react with the manures, generally rendering some portions unassimilable; whilst the remainder is diluted or transformed into compounds of quite different character from those put in. Radical changes are also brought about in the substances applied by the activity of soil bacteria.

As it seemed conceivable that certain compounds might have a specific influence on the trees' powers of resistance to disease only if they could be got into the tree in their unadulterated state; and only then, perhaps, when they were present in definite concentration, the manurial experiments already described were supplemented by others in which pure solutions were applied in such a manner that the roots could take them up directly.

The plan originally contemplated was to immerse actively growing feeding Hevea rootlets in vessels containing nutritive solutions; but this plan did not, when tried, prove feasible, owing to the difficulty of finding accessible vigorous feeding rootlets on the trees in the experimental area. The extreme drought in South India kills off to a large extent the fine rootlets of Hevea which ramify in the upper three to four inches of soil, and only where the soil is thickly covered with mulch, or in the vicinity of decaying logs or moisture, could rootlets of the kind be found in large quantity. The difficulty just mentioned made success unlikely, so other methods were adopted. For one series of plots, a large number of earthenware chatties were procured and the chatties sunk two or three feet from the base of the tree. The chatties set out in this way were filled with well-washed river sand which was subsequently saturated with solutions of the chemical to be used. One or two small lateral roots from the rubber trees subtending the chatties were then introduced in the chatty, the roots being well buried in the sand. The chatty was finally covered with a layer of earth except for a tiny hole to permit of pouring in fresh solutions, which was closed with a stone.

Throughout the first fortnight after placing the chatties, they were frequently watered in order to stimulate root development, and the chemicals with which the sand was saturated were only gradually brought up to the prescribed doses. A regular meshwork of rootlets appeared in most of the chatties within a few weeks, and periodical inspection showed the rootlets to be vigorous and apparently taking up the substances applied. The chemicals were for the most part applied in solutions of one per cent concentration either fortnightly or monthly. Monthly rather than fortnightly applications were made chiefly in the chatties receiving chemicals of a poisonous or dangerous character, but to keep the rootlets alive these pots were watered with plain water every alternate fortnight.

The list of substances which it was endeavoured to administer in this direct way included, in addition to most of the available soluble manures, a varied selection of potassium containing salts, one of which, the Acid Potassium Sulphate, may be singled out for mention because it has been alleged to assist in promoting the acid reaction desired. As in a lesser degree similar virtues have been claimed for the soluble carbonates, these were well represented. Potassium Phosphate, a highly soluble phosphate indicated by theory is too expensive for ordinary use, but its utility was tested on a few of these spoon-fed trees.

The only other substance about which anything need be said is the

Extract of Leaf Fall Resistant Leaves. A percentage of trees on near all estates come through the worst monsoons without serious loss of leaf. It can be assumed that the leaves of these trees contain some stuff that repels *Phytophthora*, or at any rate, protects the tree from the worst effects of this fungus, and there is just a possibility that if the stuff, whatever it is, could be got into other trees, their capacity for resistance might be strengthened also. We have no proof of the existence of such a substance, but no possibility however slight, could be ignored, so a collection of leaves from a tree with a long reputation for resistance to Leaf Fall was made, and with the addition of water pounded into a mash. This mash was doled out in fortnightly doses to eighteen trees.

It may be admitted at once that this crude experiment leaves much to be desired, but methods demanding innumerable precautions and refined technique are not practicable under field conditions, particularly when the trees to be treated are numbered by the hundred thousand, and until further scientific advances into the kindred questions give some assurance of success, they are scarcely justified. As long as we are working in complete darkness, there is as good a chance of hitting the object sought with a sledge hammer as with a more refined instrument. Our chief care is to avoid damaging the subject.

Sand Pits. The administration of manures in pots, though practicable on a small scale, might present difficulties should one ever have reason to imitate the method over thousands of acres. As a control upon the chatty experiments therefore, and with the object of exploring practical alternative methods of directly applying nutritive solutions, should favourable effects with any of the chemicals tried be observed, a further series of experiments were set going in which small sand pits were substituted for chatties. Pits of about two cubic feet were dug, and these after their bottoms had been lined with leaves, were filled with clean river sand and covered with stones, the latter to keep them free from wash. Soluble chemicals and manures were periodically applied to the sand pits in the manner described for the chatties. The number of chatties and pits used together with the list of manures administered are given below:—

DETAILS OF CHEMICALS ADMINISTERED IN CHATTIES AND SAND PITS

	Manures applied (Solutions)	No. of Pots used	No. of Pits
1	Extract of Leaf Fall resistant leaves ...	7	5
1 (a)	Do. do. + Pot. Sulphate 1% ...	3	3
2	Pot. Sulphate 1% ...	9	11
2 (a)	Do. + Am. Carbonate 1% ...	4	...
2 (b)	Do. + Pot. Bromide 0.2% ...	4	3
2 (c)	Do. + Pot. Phosphate 1% ...	4	4
2 (d)	Do. + Pot. Carbonate 1% ...	...	4
3	Pot. Sulphate $\frac{1}{2}$ % + Sod. Phosphate $\frac{1}{2}$ % ...	16	25
3 (a)	Do. + do. + Pot. Carbonate 1% ...	4	...
3 (b)	Do. + do. + Acid Pot. Sulphate 0.5% ...	5	...
4	Pot. Sulphate $\frac{1}{2}$ % + Sod. Phosphate $\frac{1}{2}$ % + Amm. Sulphate $\frac{1}{2}$ % ...	11	24
4 (a)	Do. + do. + Zinc Chloride 0.1% ...	4	...

DETAILS OF CHEMICALS ADMINISTERED IN CHATTIES AND SAND PITS—(continued.)

	Manures applied (Solutions)	No. of Pots used	No. of Pits
4 (b)	Pot. Sulphate $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$ + Pot. Permanganate 0.2% ...	3	...
4 (c)	Do. + do. + Arsenic 0.01% ...	3	...
4 (d)	Do. + do. + Pot. Bichromate 0.2% ...	4	...
5	Pot. Sulphate $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$ + Am. Sulphate $\frac{1}{2}\%$...	16	19
5 (a)	Do. + do. + Pot. Carbonate 1% ...	4	...
6	Pot. Sulphate $\frac{1}{2}\%$ + Am. Chloride $\frac{1}{2}\%$...	8	8
7	Do. $\frac{1}{2}\%$ + Am. Chloride $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$...	8	8
8	Do. $\frac{1}{2}\%$ + Superphosphate $\frac{1}{2}\%$...	8	9
9	Do. $\frac{1}{2}\%$ + Superphosphate $\frac{1}{2}\%$ + Am. Sulphate $\frac{1}{2}\%$...	8	9
10	Do. $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$ + Am. Nitrate $\frac{1}{2}\%$...	8	7
11	Pot. Chloride 1% ...	8	10
12	Do. $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$...	8	7
13	Do. $\frac{1}{2}\%$ + do. $\frac{1}{2}\%$ + Am. Sulphate $\frac{1}{2}\%$...	8	7
14	Sod. Phosphate 1% ...	6	13
14 (a)	Do. + Pot. Carbonate 1% ...	3	...
14 (b)	Do. + Am. Carbonate 1% ...	3	...
15	Superphosphate 1% ...	4	9
15 (a)	Do. + Pot. Carbonate 1% ...	4	...
15 (b)	... ..	...	...
16	Pot. Nitrate 1% ...	8	7
17	Do. $\frac{1}{2}\%$ + Sod. Phosphate $\frac{1}{2}\%$...	4	9
17 (a)	Do. + do. + Barium Chloride 0.2% ...	4	...
18	Calcium Nitrate 1% ...	5	9
18 (a)	Do. + Pot. Carbonate ...	3	...
19	Am. Nitrate 1% ...	4	9
19 (a)	Do. + Alum 0.5% ...	4	...
20	Am. Sulphate 1% ...	5	8
20 (a)	Do. + Pot. Carbonate 1% ...	3	...
21	Ammonium Chloride 1% ...	7	8
22	Sodium Chloride 1% ...	5	4
23	Ammonium Carbonate 1% ...	4	...
24	Zinc Chloride 0.1% ...	4	...
25	Alum 0.5% ...	4	...
26	Barium Chloride 0.2% ...	4	...
27	Magnesium Sulphate 1% ...	4	...
28	Potassium Chloride 1% ...	4	...
29	Do. Carbonate 1% ...	4	...
30	Do. Bichromate 0.2% ...	4	...
31	Do. Hydroxide 0.5% ...	5	...
32	Borax 0.2% ...	4	...
33	Arsenic 0.01% ...	4	...
34	Potassium Permanganate 0.2% ...	3	...
35	Acid Potassium Sulphate 0.5% ...	3	4
36	Potassium Phosphate 1% ...	4	3
Total ...		292	246

G. RESULTS OF THE FIRST MANURING EXPERIMENTS

In some experiments to be recorded later, attempts have been made to ascertain the influence of manuring upon yield as well as upon other characters. The detection of any increase in crop or growth was outside the purpose of this first series of experiments. All that had to be determined was the relative effectiveness of the different modes of treatment in enabling the trees to withstand *Phytophthora* attacks and hold their leaves during the 1922 monsoon.

Few perplexities arose since no camouflage was possible in such a simple test, and one could see very soon that the results of the experiment were disappointing. By September 1922, the trees in the majority of the manured plots had lost just as much leaf as the untreated trees. The only exceptions, curiously enough, were not the Phosphate or the Sulphate manured plots from which great things had been expected, but the plots that had received inorganic nitrates—the very class of manure long ago and others condemned as liable to weaken the plants' powers of resistance to disease. Only in the plots manured with Sodium Nitrate, Ammonium Sulphate and Ammonium Nitrate did the trees show that their resistance powers had benefited. The chief difference noticeable in these plots was the better retention of the foliage on the lower branches, the higher branches showing little benefit. The difference was not spectacular, but it was appreciable to one with a little experience in judging, and the writer was convinced then, as he has been since, that nitrogenous manure favourably influences *Hevea* trees against Secondary Leaf Fall. It is worth mentioning however, that some of the numerous visitors who were conducted over the site, were unconvinced that there was any improvement worth talking about in the nitrogen manured plots. As to their impression of the results in the other plots, they were able in no case to say from observations of the foliage, which had been, and which had not been manured.

Since the influence of the different manures even in the plots where positive improvement could be claimed were so unimpressive, it was scarcely likely that a closer analysis of the results would reveal any striking differences. However, as a check upon the observations, a statistical survey of the amounts of leaf carried by the trees in the different plots was undertaken. The results of the survey are given in the last column of the tables.

The personal view of the observer, the degree and direction of the light at the time, and so many other factors influence a comparison of this sort, and the percentages obtained must be taken as only roughly true. Still, these figures, taken for what they are worth, provide confirmation, if any were needed, of the general conclusion already arrived at as to the lack of distinction between the plots, and the non-response to the manuring. They show that only in the best plots do a goodly percentages of trees, up to about 30 per cent come through relatively free from damage. In most cases the percentage of unaffected trees varies between 5 and 10 per cent, the variations being so erratic as to be impossible of correlation with the manuring. Similarly with the column setting forth the percentages of trees in the different plots that have suffered a 10 per cent defoliation—regarded in South India as a light attack—the proportions affected to this extent range from 4 to 50 per cent in a manner that in no sort of way can be related to the treatment received. The large proportion of trees reported as having a 50 to 75 per cent defoliation is disconcerting. Rarely less than 50 per cent of the trees in any plot, while in many cases up to

as many as 60 or 80 per cent have experienced these formidable losses. The most eloquent testimony to the ineffectiveness of the manures is perhaps the occurrence in every plot of a number of completely defoliated trees. Notwithstanding the manure, from 2 to 32 per cent of the trees in the various plots were completely defoliated by *Phytophthora*.

In face of results like these, a more detailed examination of the plot differences for evidences of benefit would be like looking for the pin error in an account irremediably wrong by lakhs. The present writer has always contended that any expensive form of treatment for rubber must, to be justified, bring about an improvement that is unmistakable to ordinary observation. If an estate is to embark on an expenditure of from Rs. 50 to Rs. 70 per acre, the improvement attainable must be of such an order that its value can be appraised without resort to the microscope or actinometer. In the case of an improvement in the foliar appearance, such as is sought in these experiments against Secondary Leaf Fall, the improvement must hit one in the eye, so to speak. That none of the manures had this happy result is all too evident. Even the nitrogenous manures frequently failed to prevent the utter devastation of 10 per cent of the trees, and the loss of from 50 to 75 per cent of the foliage on the remainder.

With regard to the factors other than the manures, that were the subject of variation in the experiments, e.g., the time and the mode of application of the manures, a searching plot to plot inspection failed to discover any difference in the responses. Whether the trees were manured before the resumption of the new foliage or later when the wintering was over, or still later just before the *Phytophthora* attacks took place, appeared to be immaterial as far as the severity of the attack was concerned. Neither were any differences noticeable between the plots that had a single dose, and those that were given several small doses of manures. The same negative result was obtained in the case of the trees manured with out-of-the-way substances like Ferrous-Sulphate, Sulphur, Manganese, etc.

So far we have been concerned with the immediate results of the manuring during the ensuing monsoon it being assumed from the natures of the manures applied, which for the most part were highly soluble, that these would produce their maximum effect on the foliage within a few months. This assumption is not likely to be challenged, but it may nevertheless be urged that the conclusions above stated are premature; that there are still the residual effects of the manures to be considered. The point may also be made that these experiments have not gone on long enough. Possibly regular applications of manure over a number of years will succeed where a single application has failed. All these points have been given attention in a further series of experiments, in which the question of whether or not the slight improvement brought about by certain manures is attended with any other benefits in the shape of better crops and better growth is also investigated.

Negative Results of Pot and Pit Experiments.—This method of tackling the problem, while not wholly original since sand cultures are often resorted to in the laboratory or experimental garden, was certainly original in the scale undertaken. Complete success was scarcely envisaged, but one entertained some hope that these new methods would have evoked responses

sufficiently definite in character to point the way to further endeavours. Unfortunately no outstanding signs of improvement were observable in any of the chatty or sand pit fed trees. These seemed to have just as much or just as little leaf fall as their neighbours. The absence of any definite indications from these experiments was especially disappointing, and though several of the experiments were repeated the following year, one was not encouraged or extend the series or develop the method further.

H. SECOND SERIES OF MANURING EXPERIMENTS AGAINST SECONDARY LEAF FALL

In view of the favourable indications shown by nitrogenous manure, trials of the commoner nitrogenous manures were continued in 1923. The plan followed, so far as supplies permitted, was to give the plots that received one or other of the nitrogenous manures in 1922, a repeat dose of the same manure. The manures repeated comprised Sodium Nitrate, Ammonium Sulphate, Ammonium Nitrate, and Potassium Nitrate. As a small balance remained of the Potash manure Kainit, repeat dose of this seemed worth trying also. For reasons already stated, the quantities applied per tree were kept low.

In addition to setting out about twenty plots with the soluble quick-acting nitrogen and potash manures, two or three of the more bulky slow acting organic manures such as Fish Guano and Blood and Bone Meal were given a trial. These substances were applied alone, and in conjunction with nitrates in virgin plots which had served as controls the previous year, as well as in plots well limed beforehand.

That the Phosphatic manures had given no beneficial indications so far, was conceivably due to their slowness of action; and, since results were not despaired of the two Phosphate plus Nitrogen containing manures (Guano and Blood and Bone Meal) were not mixed up with the previous Phosphatic manure plots, which still remained uncontaminated for the 1923 season's observations. It was not considered desirable to give a second dose of Basic Slag nor was it necessary to make further trials with this manure on the same soil. Basic Slag was however, tested again on two large plots in what is now the new Aneikolam Rubber Experimental Station. The soil on this Station is a sort of quartzite, and very different from the soil in which the Basic Slag was previously tried.

Although the time of application had not so far been observed to have had any influence on the incidence of Secondary Leaf Fall; the H. A. P. M. experiments indicate that the manurial action of fertilizers like Sodium Nitrate is most pronounced when it is applied in time to be built up into the new foliage put on after wintering. In appreciation of this fact, all the manures in the second set of experiment were got in either in December, or during the first week of January, before the annual wintering of Hevea trees in South India had commenced.

Details of the 1923 manuring are given in column 4 of the table in the next page. Column 3 shows the treatment undergone by the different plots in the previous year.

MANURIAL EXPERIMENTS AGAINST SECONDARY LEAF-FALL, 1922 & 1923

Plot	No. of trees in Plot	Manures applied in early 1922 and quantities per tree				Manures applied in December 1922 and January 1923
Oa ₁	20	4 lbs. Lime	...	...	...	3 lbs. Fish Guano.
Oa ₂	20	Do.	...	...	...	3 lbs. Fish Guano and $\frac{1}{2}$ lb. Am. Sulphate.
Ob ₁	20	Do.	...	...	...	3 lbs. Blood and Bone Meal.
b ₂	20	Do.	...	...	...	3 lbs. Blood and Bone Meal and $\frac{1}{2}$ lb. Am. Sulphate.
c ₁	20	Do.	...	...	...	2 lbs. Fish Guano and 2 lbs. Blood and Bone Meal.
c ₂	20	Do.	...	...	...	2 lbs. Fish Guano, 2 lbs. Blood and Bone Meal and $\frac{1}{2}$ lb. Am. Sulphate.
Tb	40	$1\frac{1}{2}$ lbs. Am. Sulphate, $\frac{1}{2}$ lb. Pot. Sulphate, $\frac{3}{8}$ lb. Pot. Chloride and $\frac{3}{4}$ lb. Super- phosphate.				$\frac{1}{2}$ lb. Am Sulphate.
Xa ₁	40	Control	...	...	...	3 lbs. Fish Guano
a ₂	20	Do.	...	...	...	3 lbs. Fish Guano and $\frac{1}{2}$ lb. Sod. Nitrate.
a ₃	20	Do.	...	...	...	3 lbs. Fish Guano and $\frac{1}{2}$ lb. Sod. Nitrate and $\frac{1}{2}$ lb. Am. Sulphate.
b ₁	40	Do.	...	...	...	3 lbs. Blood and Bone Meal.
b ₂	20	Do.	...	...	...	3 lbs. Blood and Bone Meal and $\frac{1}{2}$ lb. Sod. Nitrate.
b ₃	20	Do.	...	...	...	3 lbs. B. and B. Meal $\frac{1}{2}$ lb. Sod. Nitrate and $\frac{1}{2}$ lb. Am. Sulphate.
c ₁	40	Do.	...	...	...	2 lbs. Fish Guano and 2 lbs. Blood and Bone Meal.
c ₂	20	Do.	...	...	...	2 lbs. Fish G., 2 lbs. B. B. Meal and $\frac{1}{2}$ lb. Sod. Nitrate.
c ₃	20	Do.	...	...	...	2 lbs. Fish G., 2 lbs. B. B. Meal, $\frac{1}{2}$ lb. Sod. Nitrate and $\frac{1}{2}$ lb. Am. Sulphate.
A ₁ b	40	$\frac{3}{8}$ lb. Am. Nitrate, $\frac{5}{8}$ lb. Pot. Sulphate and 2 lbs. Basic Slag.				$\frac{1}{2}$ lb. Am. Nitrate.
D ₁ b	47	$\frac{1}{2}$ lb. Am. Nitrate	...	...	...	$\frac{1}{4}$ lb. Am. Nitrate.
c	30	$\frac{1}{2}$ lb. Am. Nitrate and $\frac{1}{8}$ lb. Pot. Chloride	...	...	...	$\frac{1}{4}$ lb. Am. Nitrate.
E ₁ a	40	$\frac{1}{4}$ lb. Sod. Phosphate, $\frac{3}{8}$ lb. Pot. Chloride, and $\frac{1}{4}$ lb. Am. Nitrate.	...	...	...	$\frac{1}{4}$ lb. Am. Nitrate.
E ₁ b	40	$\frac{1}{4}$ lb. Sod. Phosphate, and $\frac{3}{8}$ lb. Pot. Chloride.	...	...	...	$\frac{1}{4}$ lb. Am. Nitrate.
Ab	37	$\frac{3}{4}$ lb. Sod. Nitrate	...	...	...	$\frac{1}{2}$ lb. Sod. Nitrate.
Ac	44	$\frac{1}{2}$ lb. Sod. Nitrate and $\frac{3}{8}$ lb. Pot. Nitrate	...	...	...	$\frac{1}{2}$ lb. Sod. Nitrate.
Bb	74	$\frac{1}{2}$ lb. Pot. Chloride	...	...	...	$\frac{1}{2}$ lb. Pot. Chloride.
Cb	45	$\frac{1}{2}$ lb. Pot. Nitrate	...	...	...	$\frac{1}{4}$ lb. Pot. Nitrate.
Cc	44	$\frac{1}{2}$ lb. Pot. Nitrate and $\frac{1}{2}$ lb. Superphosphate.	...	...	...	$\frac{1}{4}$ lb. Pot. Nitrate.
Db	83	$\frac{1}{2}$ lb. Pot. Chloride and 2 lbs. Basic Slag	...	...	...	$\frac{1}{2}$ lb. Pot. Chloride.
Eb	83	$\frac{1}{2}$ lb. Pot. Nitrate and 2 lbs. Basic Slag	...	...	...	$\frac{1}{4}$ lb. Pot. Nitrate.
Fc	42	$\frac{1}{2}$ lb. Sod. Nitrate, $\frac{5}{8}$ lb. Pot. Chloride and 2 lbs. Basic Slag.	...	...	...	$\frac{1}{2}$ lb. Sod. Nitrate and $\frac{1}{4}$ lb. Pot. Chloride.
Ha	57	$\frac{3}{4}$ lb. Sod. Nitrate, $\frac{1}{4}$ lb. Pot. Chloride and 1 lb. Superphosphate.	...	...	...	$\frac{1}{2}$ lb. Sod. Nitrate.
Ib	40	$\frac{3}{8}$ lb. Am. Nitrate, $\frac{5}{8}$ lb. Pot. Chloride and 2 lbs. Basic Slag.	...	...	...	$\frac{1}{4}$ lb. Am. Nitrate and $\frac{1}{4}$ lb. Pot. Chloride.

MANURIAL EXPERIMENTS AGAINST SECONDARY
LEAF-FALL, 1922 & 1923—(continued.)

Plot	No. of Trees in Plot.	Manures applied in early 1922 and quantities per tree	Manures applied in December 1922 and January 1923
Jb	43	$\frac{7}{8}$ lb. Am. Sulphate and 2 lbs. Basic Slag ...	$\frac{1}{2}$ lb. Am. Sulphate.
Kc	40	$\frac{7}{8}$ lb. Am. Sulphate, $\frac{1}{4}$ lb. Pot. Sulphate, $\frac{1}{4}$ lb. Pot. Chloride, 4 lbs. Lime and 2 lbs. Basic Slag.	Do.
Lb	40	$\frac{7}{8}$ lb. Am. Sulphate ...	Do.
Mb	42	$\frac{7}{8}$ lb. Am. Sulphate and 1 lb. Super- phosphate.	Do.
Nc	40	$\frac{3}{4}$ lb. Am. Sulphate, $\frac{1}{4}$ lb. Pot. Sulphate and 1 lb. Superphosphate.	Do.
Exp. St.	200	... ..	2 lbs. Basic Slag.
Exp. St.	200	... ..	3 lbs. Basic Slag.

I. RESULTS OF 1923 MANURING EXPERIMENTS

In their influence upon the course and character of Secondary Leaf Fall disease, the second series of manuring experiments were as barren of results as those already described. During the early part of the 1923 monsoon, it did appear as if the manured plots generally were holding their leaves better, but before the monsoon was over, both the freshly manured plots, and those manured the previous year were, for the most part, indistinguishable from their untreated neighbours. Of any residual effect from the previous year's manuring, or of any immediate effect, there were no traces except in the inorganic nitrate manured trees, which again came through the ordeal without losing as much foliage from their lower branches as did the adjoining trees. It is worth noting that from the commencement of wintering onwards, the foliage on these trees was superior both in colour and quantity to that on the trees differently treated and untreated.

No enhanced effect was noticeable on the incidence of Leaf Fall Disease as a result of the application of nitrates for two year's running, and practically the same description would be given of these plots as was given at the end of the first season. Notwithstanding the manuring, the trees in the nitrate plots, like their neighbours, suffered complete defoliation in many cases, and 50 to 75 per cent defoliation in others, and as before, the result was so unimpressive to visitors, that they refused to spend time in looking over the plots in detail, particularly after they had seen the results from the Spraying. A statistical survey of the amounts of defoliation would bring out nothing new, and it was not attempted a second time.

It is not easy in a report covering so much ground to do justice to all the separate experiments it describes, and little or nothing has been said about the precautions, the numerous measurements and preliminary trials undertaken to ensure accuracy and avoid contamination of one kind of manure by the other or damage to the trees. In the quest of a possible ameliorant, 8 nitrogen manures, 6 phosphate manures, 9 potassium

manures, 3 forms of calcium and more than a dozen miscellaneous chemicals of reputed prophylactic value were most exhaustively tested. The various desirable permutations and combinations involved the laying out, during the first season, of 88 field plots, and 35 miniature plots. In the sand pit and pot experiment, 82 separate combinations were tested out. Over 50 of these experiments were repeated in 1923. It is doubtful whether such a complete series of manuring experiments has ever been carried out in the East before.

It will be evident from the foregoing that not much has been left undone that can be done by way of manuring or soil treatment to discover an antidote to Secondary Leaf Fall. If any planters have been under the impression that spraying has been resorted to before the possibilities of manuring have been properly explored, that impression should now be removed. It was only after the whole range of manures and likely substances had been tested out and found unavailing that the practicability of the alternative means of protection. Spraying was fully investigated and its adoption finally recommended.

Failing a positive remedy, it is always useful to know what not to do in regard to a particular disease, and if these experiments do little else, they will prevent further sums of money being expended on manures that are barren of effect. The belief that manuring of some sort or other can give protection against the recurring attacks of *Phytophthora* was common at one time in South India, and the belief is still held in Ceylon. The distribution in intensity of the disease favours such a view, which, as we have seen, is encouraged by the work of Comes and the *Phytophthora* culture trials of Stoughton-Harris. The evidence of the latter, particularly, shows that if the experiments that have been described had not been carried out, it would be necessary to carry them out. We now know the measure of protection manuring can afford, and in South India any way, we no longer entertain the illusion that a virulent and hardy parasite like *Phytophthora Meadii* can be successfully fought with manure. It is somewhat of a surprise to find that the one manure that is of slight value as an ameliorant is the very manure that theory and experience have condemned as weakening and predisposing other crops to disease.

While qualitatively practically the whole field was explored in the first two series of experiments, the quantitative trials of nitrogenous manures were, owing to concentration on other work, left until later. Experiments with Sodium Nitrate, Ammonium Sulphate, and other nitrogenous manures, in quantities of from 2 up to 6 lbs. per tree have in progress since December 1924. A full amount of these cannot be given until reliable figures have been obtained as to the influence of the manuring upon yield, but a report on the experiments to-date with recommendations will follow this in a week or two when the influence of the manure upon leaf fall can be observed once more.

J. DIRECT ABSORPTION EXPERIMENT—RESULTS FROM SECOND SERIES

The direct administration of most of the various substances already listed was continued in the chatties and pits prepared the previous year. The trees showed as before complete indifference to the attention bestowed, and nothing emerged from these further trials.

U.P.A.S.I. SPORTS CLUB

NOTICE

CRICKET. The match in Madras against the M.C.C. has been fixed for October 2nd and 3rd.

THE RUGBY FOOTBALL TOURNAMENT. This commences the following day, October 4th.

Both teams therefore will go to Madras at the same time, which will be convenient as regards concession tickets on railway; and also for the reason that several of our Rugger men are useful cricketers and, if able to go, may have the chance of representing the Planters at both games.

It would make it easier for the Committee if names of men from each district, who wish to go to Madras for either game or both, were sent in prior to the Sports Meeting which is to be held during Conference Week in Bangalore next month.

MEMBERSHIP. All District Associations are now subscribers to the Club.

DEVERSHOLA P. O.,
July 4, 1926.

G. W. FULCHER.

COFFEE

EMPIRE SOURCES OF SUPPLY

BY

ALFRED S. BOOTH

(Continued from page 444 issue of July 3, 1926)

A coffee tree in blossom is one of the most beautiful sights in Nature. The blossom falls off after two or three days, leaving the germ of the fruit, which is called the cherry; this passes through various stages until it arrives at maturity, when it is of a purple colour, and has a rich pulp resembling an English cherry. This pulp covers two parchment casings, which face each other, and each contains a coffee berry. Before the berry is ready for the market the ripe cherry has to pass through many processes. First, the pulping process, whereby the parchment casings are squeezed out of the outer pulp; then the fermenting process; and then the washing process, during which any pulp that still adheres to the parchment is made easily removable. After washing comes drying, the washed parchment being spread out in rows on the drying grounds (patios or barbecues, as they are called). Here the parchment is dried by the rays of the sun, the rows being turned over and over periodically, so as to ensure the thorough drying of the whole mass. This sun-drying may take any time from one to three weeks. Sometimes artificial heat driers are used, which, though it means greater expense, certainly expedite the drying process. The dry parchment coffee is then collected and put in bags to be conveyed to the factory, where the next operation takes place. This is called husking or hulling the coffee. By means of the husking machine the parchment casing is removed, leaving the raw berry free.

SIZING

Before it is sold on the market the raw coffee is generally passed through a sizing machine, whereby the berries are sorted into sizes—first, second, and third—Peaberry, and Triage (broken). They are then ready to be sold in public sale or by private treaty. The above operations, from the husking to the sizing, are generally carried out in the country of production, but sometimes the coffee is shipped in the parchment to the country of consumption, and the processes from husking to sizing are done there. By shipping in the parchment a certain amount of colour in the raw berry is preserved, and in certain conditions of the market this extra colour ensures higher prices.

The commoner descriptions of coffee are sometimes treated by what is called the unwashed process. By this method, which is used to a great extent in Brazil, the ripe pulp is allowed to dry on to the inner parchment casing, so that it resembles a pod rather than a cherry, and the berry is then extracted by one process. Coffee so prepared has naturally a coarser flavour.

The chief coffee growing countries of the British Empire are :—India, Jamaica, Kenya Colony, Uganda, and Tanganyika Territory. Kilimanjaro, Arusha, Usumbara, and Bukoba coffees come from the British East African territories.

Coffee has been seriously cultivated in India since 1830, when Mr. Cannon opened an estate in Mysore and during the next decade many others followed his example. The chief districts in which it is grown are Mysore, Coorg, Nilgiris, Wynaad, and Shevaroy, and in 1924 there were altogether 70,757 acres in India under European or Indian cultivation, Mysore ; with 25,383 acres, and Coorg, with 16,791 acres, easily heading the list. In addition there are several small lots of 20 to 30 acres apiece, mainly in Mysore and Coorg, owned by natives, amounting in all to about 50,000 acres. Production varies according to the season ; in 1924 and 1925 the regular coffee shipping ports exported 218,200 cwt. and 288,220 cwt. respectively. Of these quantities the following countries were the principal recipients :—

	1924	1925
	Cwt.	Cwt.
United Kingdom	43,719	115,182
Europe	133,511	115,889
Asia (practically all to the Persian Gulf)	20,719	30,758
Australia	8,625	7,985

At one time Indian coffees, especially Mysore and Nilgiris, were in great favour in the United Kingdom, but to-day only the finer qualities maintain their position, and a considerable proportion of the quantity imported is re-exported to various parts of Europe. It is worth mentioning that the consumption of coffee in India itself has increased very considerably during the last few years, but it cannot be said that India is going ahead in coffee production, indeed rather the reverse.

(To be continued next week.)

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING MAY, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	490	...	53	...	10	...	101	79
Calicut	52	...	100	3,568	6,448	...	...	19
Mangalore	611	...	...	877	...	...	...	...
Tellicherry	...	...	81	204	29	...	...	...
Bombay	...	...	...	...	...	...	...	...
Total	1,153	...	234	4,649	6,487	...	101	98
Previously	9,205	...	26,132	27,547	16,281	9	...	7,311
Total cwts. since 1-1-26.	10,358	...	26,366	32,196	22,768	9	101	7,409
<i>Rubber—</i>								
Madras	...	1,290	...	...	...	...	...	...
Calicut	...	67,046	87,317	...	...	...	...	...
Cochin	...	92,499	249,947	6,720	...	...	58,290	...
Tuticorin	...	94,605	...	...	...	...	...	...
Alleppey	...	87,590	13,350	...	...	...	22,400	...
Total	...	343,030	350,614	6,720	...	...	80,690	...
Previously	...	1,789,834	1,545,936	51,239	...	...	613,694	72,845
Total lbs. since 1-1-26.	...	2,132,864	1,896,550	57,959	...	...	694,384	72,845
<i>Tea—</i>								
Madras	943	...	296,700	...	920	...	...	...
Calicut	7,424	63,413	1,151,364	...	...	...	5,250	...
Cochin	11,344	33,453	1,231,813	...	...	1,000	...	...
Tellicherry	...	...	41,202	...	...	...	...	...
Tuticorin	...	446,123	888,446	...	...	...	...	...
Alleppey	...	50,791	28,388	...	...	...	...	...
Total	19,711	593,780	3,637,913	...	920	1,000	5,250	...
Previously	65,538	345,478	3,046,178	6,200	640	3,040	...	...
Total lbs. since 1-4-26.	85,249	939,258	6,684,091	6,200	1,560	4,040	5,250	...

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending July 3, 1926

Bank Selling Demand Draft on London

28th	29th	30th	1st	2nd	3rd
17 27/32d.	17 27/32d.	17 27/32d.	17 7/8d.	17 7/8d.	17 7/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending June 5, 1926	January 1 to June 5, 1926	January 1 to June 5, 1925
				s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING JUNE 5 AND 12, 1926)			N. India.	1 8·21	1 9·09	1 5·81
(a) Anamalais—			S. India.	a1 9·23	b1 9·67	c1 6·46
Kallyar ...	119	1 10	Ceylon ...	1 9·69	1 10·40	1 8·28
Thonimudi ...	396	1 9½	Java ...	1 5·69	1 5·55	1 1·05
Nallamudi ...	323	1 9½	Sumatra.	1 7·58	1 7·59	1 4·42
Sholayar ...	112	1 9½	Nyassa-land.	1 6·53	1 6·46	1 2·28
(b) Central Travancore.			Total	d1 8·36	e1 9·15	f1 6·08
Fairfield ...	95	1 9¼	District	Week ending June 12, 1926	January 1 to June 12, 1926	January 1 to June 12, 1925
Ladrum ...	43	1 9				
Caradigoody ...	100	1 8¾	N. India.	s. d.	s. d.	s. d.
Stagbrook ...	110	1 7¾	S. India	*1 8·08	††1 9·53	‡†1 6·52
(c) Kanan Devans—			Ceylon...	1 8·69	1 10·26	1 8·25
Gundumallay ...	52	1 10¼	Java ...	1 5·16	1 5·51	1 0·99
Perriavurai ...	76	1 9½	Sumatra.	Nil.	1 7·59	1 4·34
Letchmi ...	69	1 9½	Nyassa-land.	1 5·69	1 6·45	1 2·11
Gundumallay ...	162	1 9¼	Total ...	*1 7·86	†1 9·07	‡1 6·03
(d) Mundakayam—			(B) COFFEE			
Yendayar ...	79	1 6¾	London Prices (seven days ending June 15, 1926)			
(e) Nilgiris—						
Prospect ...	124	2 0	(a) Mysore—	bgs.	s. d.	Grades.
Prospect ...	221	1 11	Santawerry J.	32	152 0	1,2,3, 'PB &' T.
Nonsuch ...	110	1 11	Do.	29	154 6	Do.
Nonsuch ...	146	1 10¾	D. Bababoodan	41	158 6	Do.
(f) Nilgiri-Wynaad—			(C) RUBBER			
Seaforth ...	124	1 8¾	The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, July 6, 1926, was 20½d.			
Rousdon Mallai ...	63	1 7¼				
Barwood ...	150	1 6¾				
New Hope ...	97	1 6½				
(g) South Travancore—						
Poonmudi ...	78	1 7½				
Merchiston ...	99	1 7				
(h) Wynaad—						
Erramaculla ...	56	1 7¾				
Erramaculla ...	184	1 7½				
Elstone ...	103	1 7¼				

a 2,939

d 85,458

** 6,434

* 87,846

b 69,220

e 1,339,169

†† 75,654

† 1,427,015

c 75,222

f 1,129,405

†† 80,409

† 1,212,209

(b) *Précis of Reports on the London Market received on Monday, July 5, and covering the seven days ending Tuesday, June 15 :—*

(1) *Tea*.—Prices ruled considerably easier at the sale held on Wednesday, June 9th; Higher Priced teas, Mediums and Commons, being cheaper than on the preceding Monday by respectively 1d., $\frac{1}{2}$ d. and $\frac{1}{4}$ d. per lb. As a result (*vide* the previous page), the South Indian average for the week ending June 12th was only 1/8·08d. as against 1/9·23d. the week before. The Indian Tea Association estimates the yield to the end of May 1926 at 37 $\frac{3}{4}$ million pounds as compared with 37 $\frac{1}{2}$ million and 29 million for the corresponding period of 1925 and 1924.

(2) *Rubber*.—During the seven days under review stocks increased by 1,398 tons to 22,281 tons, while the 'spot' price remained round about 1/8 $\frac{1}{2}$ d. Messrs. Sanderson and Company point out that the new New York Rubber Exchange is a feature which undoubtedly complicates the market, and renders it more difficult than ever to foresee the probable trend of prices; because it involves the advent of an entirely new set of operators of unknown magnitude and resource and has introduced an additional element of speculation.

(3) *Coffee*.—As indicated on the previous page, the very small quantity of Indians—102 bags in all—on offer fetched prices which showed a considerable advance on the figures realized during the preceding seven days. On June 12, stocks in London of African, Indian, and other kinds respectively were given (in bags) as 35,450, 16,994, and 118,193; as compared with 37,380, 41,482, and 131,714 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, June 27, 1926, to Saturday, July 3, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	2·29	24·12	26·41	19. Naduvattam	0·92	8·86	9·78
2. Kalthuritty.	2·83	36·08	38·91	20. Coonoor ...	0·73	4·32	5·05
3. Tenmalai ...	5·46	37·15	42·61	21. Kotagiri ...	3·85	6·94	10·79
4. Mundakayam.	4·83	33·29	38·12	22. Ootacamund	1·81	13·66	15·47
5. Peermade...	10·69	36·92	47·61	23. Yercaud ...	2·57	15·74	18·31
6. Twyford ...	13·20	43·16	56·36	24. Devala ...	4·52	20·98	25·50
7. V'periyar ...	4·38	15·05	19·43	25. Gudalur ...	1·56	10·15	11·71
8. Kalaar ...	9·10	32·65	41·75	26. CALICUT ...	7·14	31·10	38·24
9. Chittuvurrai	0·81	12·38	13·19	27. Kuttiyadi ...	N.R.	31·38	N.R.
10. BODI'KANUR	0·16	3·55	3·71	28. Vayittiri ...	6·81	23·17	29·98
11. COCHIN ...	6·95	43·42	50·37	29. Manantoddi.	2·52	11·68	14·20
12. Mooply Valley.	9·85	35·10	44·95	30. Billigiris ...	0·81	9·59	10·40
13. Pachaimalai	4·98	21·81	26·79	31. Sidapur ...	2·14	12·98	15·12
14. Mudis ...	12·89	40·45	53·34	32. Pollibetta...	2·42	11·60	13·02
15. Nell'pathy...	3·17	11·47	14·64	33. Somwarpett	1·04	5·19	6·23
16. POLLACHIE.	0·12	5·29	5·41	34. Ballupete ...	1·12	5·63	6·75
17. Manjeri ...	2·00	23·25	25·25	35. MANGALORE.	11·04	26·32	37·36
18. Nilambur ...	6·19	16·70	22·89	36. MADRAS ...	0·05	0·60	0·65

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : **UPASI, Madras**

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 29] SAT., JULY 17, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 467	Coffee—Empire Sources of	
Agricultural Science and Agri-		Supply ...	... 473
cultural Art ...	... 469	A Planter Abroad ...	... 476
Budded Rubber ...	... 470	Commercial and Meteorologi-	
The Bibby Line 'Shropshire' ...	471	cal ...	... 479

EDITORIAL NOTES

We very much regret to learn that Mr. G. W. Wallace succumbed on the 8th instant to an attack of pneumonia at the early age of 26. On behalf of our Readers, we would extend our sincere condolences to his relatives in their irreparable loss. It is indeed tragic that Mr. Wallace should have been cut off so prematurely in a career which was full of promise ; but the bereaved may find some consolation in the fact that, young as he was, he had made his mark in the Anamalais before he died. He had, we understand, recently been promoted from an Assistantship on Thoni Mudi to the Managership of Gaja Mudi Estate ; and as many of our Readers know he had a short time before his death been elected Honorary Secretaryship of the Anamalai D. P. A.

We hear that Dr. Anderson, that Medical Superintendent of the Hull Corporation Mental Hospital, proposes to import malarially infected mosquitoes which will be housed in glass receptacles specially prepared for them in a mosquito-proof room. Lunatics suffering from General Paralysis (which takes very

heavy toll of the mentally weak) will be introduced for treatment into the room; and, when the mosquito-proof doors have been closed behind them, the mosquito receptacles will be opened so that the inmates may emerge to feast upon the victims—or in this case we should perhaps say the patients whom they are designed to cure. We have never heard of tame mosquitoes, so would be interested to learn how the ones in question will be induced to return to their glass houses when for the time being their Mission of Healing is done. And yet if some sufficient inducement is not forthcoming they will—sad thought!—probably have to be condemned to a Martyr's death before the door of the 'operation' room can be safely opened to let the patients out. Quite seriously, however, Dr. Anderson expects wonderful results from his mosquitoes, and is apparently justified in his optimism by the cures he has already effected through transmitting the blood of sufferers from Malaria into the veins of the paralysed. That procedure, however, involves the risk of complications if the transmitted blood is infected with other diseases besides Malaria; and hence this new and unique experiment, which it is confidentially expected will very appreciably reduce the large number of deaths from paralysis which occur in the Lunatic Asylums each year.

The import of Plants and Seeds from this Presidency to Ceylon is now only permissible under a certificate issued by the Government Entomologist and the Government Mycologist at Coimbatore (and countersigned by the Director of Agriculture, Madras) to the effect that such Plants and Seeds have been examined, fumigated and disinfected; and are free from disease. Consigners, of course, have to bear the extra expense caused by the consequent diversion to Coimbatore of the Plants and Seeds which they wish to send to Ceylon.

We learn that the Chilean Nitrate Producers' Association of Valparaiso, Chile, last month reduced the price of Commercial (95 per cent) Nitrate of Soda to £9. 5s. 6d. per ton of 2,240 tons. F.A.S. Chilean Ports. This price is to be raised by fortnightly instalments; until in January next it touches £10. 0s. 8d. at which figure it is to be stabilized until the end of May.

Sir George Maxwell, K.B.E., C.M.G., the Chief Secretary to the F.M.S. Government, in his annual report for 1925 states that the Controller of Rubber, working in conjunction with the Secretary for Agriculture, calculates that the total acreage under rubber in British Malaya is 2,110,000 of which 1,140,000; 450,000; 295,000; 185,000; 33,000; and 7,000, are respectively in the F.M.S.; Johore; the S.S.; Kedah and Perlis; Kelantan; and Trengganu.

Dr. G. Bryce, D.Sc., presently Director of Agriculture in New Guinea, has been appointed Director of the Malayan Rubber Research Institute. Though only 40, he has already had vast experience in the practical application of his technique; having been attached as Botanist to a commercial undertaking in Abyssinia from 1907 to 1909 and in Africa from 1910 to 1912; and—after War Service in the R.A.M.C. and at the War Office Entomological Laboratory at Sandwich—Assistant Botanist and Mycologist and afterwards Botanist and Mycologist in Ceylon from 1913 to 1921.

AGRICULTURAL SCIENCE AND AGRICULTURAL ART

Mr. F. W. South of the Agricultural Department of Malaya, in addressing the Incorporated Society of Planters assembled at Kuala Lumpur for their Third Annual Conference on Thursday, June 17, stressed very forcibly the necessity for Liaison Officers between, on the one hand, the large body of practical planters who are practising an art; and, on the other hand, the small body of Research Officers who are studying the science on which that art depends.

The Practical Planter, he said, tends, and might in an extreme case come, to regard the Research Officer as a 'remote and unknown person, whom he has hardly ever met, whose address he has lost, and whose written language he cannot understand; a person who works among curious glass vessels in the recesses of a laboratory, and who is engaged on obstruse theoretical problems having little, if any, bearing on the every-day difficulties which the Planter has to overcome.' On the other hand, of course, the Research Officer may be too prone to rate the Planter as a conservative dullard content to carry on the purely empirical methods of his ancestors, and rather sceptical regarding the practical application of the knowledge which the Research Officers have so patiently acquired.

These opposite stand-points are not by any means based solely on prejudice: the Specialist for example may come to find himself so absorbed in the life history of a pest in the abstract that he fails to follow up the various possible practical methods for its destruction in the concrete in the field; and propounds remedies which, though efficacious theoretically, are inapplicable practically on account of either unfavourable conditions or excessive expense. The Planter, on the other hand, when he does apply the recommendations which have been indicated by research work, may often fail, through lack of care and thoroughness, to obtain satisfactory results, and as a consequence blame his Scientific Officers when he really should blame himself.

Hence the Malayan Agricultural Department, and in its wake the new Malayan Rubber Research Institute, have appointed 'Field' Officers with good, but not necessarily the highest, honours in Agricultural Science; who, by correspondence and periodical visits to the Research Institutes on the one hand, and by continued Estate tours on the other are kept advised both of the latest research developments and of the difficulties with which the Planters are being confronted from day to day. In many cases they are thus themselves able to give the Planter who is in some difficulty the advice and guidance which he requires; and, even if on occasion they find themselves unable to do so, they can invariably put up the problem for elucidation to the specialist Research Officer concerned in succinct and lucid form. In their touring too they can, of course, see that the Planter is correctly applying the methods and remedies which he has been persuaded to adopt; and also, with their trained eyes, 'spot' the appearance of any new disease, and see that all possible steps are taken to exterminate it before it has obtained a disastrous hold.

Many other phases of utility for these Field Liaison Officers suggest themselves. To cite but one instance in conclusion, it is to be feared that as things are Agricultural Chemists all too seldom hear for their future guidance whether the recommendations they forward with their soil analyses have been adopted; and, if so, with what measure of success.

BUDDED RUBBER

BY

HERBERT ASHPLANT, A.R.C.S., RUBBER SPECIALIST,
U. P. A. S. I.

Under the caption 'Yield—and Rumours of Yields', *The Planters' Chronicle* of July 2nd refers to the Ceylon rumour regarding the phenomenal yields alleged to be obtained from budded rubber. The original rumour stated that a Sumatran estate was getting 1,760 lbs. per acre from its budded rubber. This has now been improved upon I see. Not to be outdone, a newspaper correspondent, who states that he has budded over 5,000 acres, claims to be getting 2,000 lbs. per acre per annum !

While it is credible that the yields from a few of the oldest and very exceptional budded trees may by this time have approached the first figure quoted, it is fairly certain that no large area is giving anything like the yields claimed. Such yields are unlikely, since all the budded rubber at present in tapping is composed of mixed clones, some of which are high yielding, and others medium or poor yielding.

My scepticism is based on something besides a nodding acquaintance with many of the budded areas in the country mentioned.

Desiring to get up-to-date information, I wrote, a few weeks ago, to a high placed authority further East, who has a large acreage of budded rubber under his control. I have no permission to publish his reply and can only say here that his statements show the position to be still very much as summarized by me in *Recent Developments in the Rubber Planting Industry* which is obtainable from the Secretary, U.P.A.S.I., Post Box 155, Madras, at Rs. 1-2-0, post free. The problem engaging the attention of estates is still that of proving out their stock, and no estate has yet sufficient proven high yielding bud mothers to be able to plant large areas exclusively with these. As long as this is the case, the full possibilities of buddings cannot be realized. Those who wish to ascertain what these possibilities are, however, should study the yield records of the best clones, then five years of age, in the work referred to, adding at least the usual percentage yield increase with age to the figures there given.

My friend does not confirm or deny the Ceylon story, but from his statement that he is content if he gets 50 per cent improvement in yield, and that some areas do not give this, the claims would appear to be exaggerated.

Many planters will think a 50 per cent increase in yield worth the effort. For their benefit the concluding paragraph of the letter may be quoted: 'The day when we shall be able to plant estates with selected seed is far off, and though budding is difficult and expensive, it is the only method I would advice anyone to follow.'

THE BIBBY LINE FLEET

M. V. 'SHROPSHIRE'.

Thursday, June 10, 1926, was a Red Letter Day in the annals of the Bibby Line ; for a new steel twin-screw passenger and cargo motorship was launched by the Fairfield Shipbuilding and Engineering Co., Ltd., at Govan. We note from the Company's advertisement which appeared in our Paper of the 3rd instant that this new Vessel—The Shropshire—is due to sail for England from Colombo on December 22, 1926, and again on March 30, 1927 ; and as some of our Readers will probably be availing themselves of one of these opportunities we append, with acknowledgements to *The Journal of Commerce*, the following descriptive sketch :—

The Shropshire has a length overall of 502 ft.; breadth, moulded, 60 ft. ; and depth, moulded, 36 ft. 3 in. to upper deck. She is of the poop, bridge and forecastle type, with cruiser stern and straight stem, and is built to Lloyd's 100 A. 1. class 'full scantling vessel,' rigged as a fore-and-aft schooner with four raking pole masts and a single funnel amidships, in keeping with the usual practice of the Bibby Line.

The accommodation, which is for first-class passengers only, is disposed on the four upper decks amidships, principally in island deckhouses giving the maximum of light and air, arranged for one, two and three berth rooms, there being a large number of one and two berth rooms. State-rooms are arranged on the Bibby cabin principle. A wash-basin, with fresh water laid on, is fitted in all state-rooms. A large room is reserved for nurses, and a room for ayahs.

The public rooms, which consist of drawing room, lounge, and smoke-room, are large and airy apartments, situated on the boat deck ; the dining saloon is in the bridge house forward. The drawing room is a handsome painted apartment in the Adam's period fitted with an electric fireplace, grand piano and furniture to harmonize.

LUXURIOUS EQUIPMENT

The lounge is spacious, decorated and furnished in the Georgian style, having walls of polished walnut with dull gold ornamentations. The smoke-room is panelled and furnished in oak of Jacobean design, and gives access to a verandah, which is open at the aft end and is fitted with an ornamental teak balustrade, with furniture of teak of suitable design, a raised teak floor and large windows give a clear view over the ship's side.

The dining saloon, of Jacobean design, is panelled in polished oak, with oak beams and white panelled ceiling. Seating accommodation is provided for the full complement of passengers at one sitting. A grand piano is also provided in this saloon. Suitable offices are provided in the vicinity of the public rooms.

Large open spaces are provided for promenading, dancing and deck games, including deck tennis and skittle alleyways specially arranged in the forward well. A suitably appointed barber's shop is conveniently

situated amidships on the bridge deck, and a surgery with up-to-date equipment is fitted adjacent to the doctor's room. Adequate accommodation is provided for officers, engineers and crew throughout the vessel. A large laundry, fully equipped with the latest machinery, is on the boat deck aft.

The passengers', officers' and crew's accommodation is ventilated by an arrangement of electric supply and exhaust fans, also by natural ventilation. Numerous electric flail fans are fitted in all the public rooms, also a cabin fan to each state-room. A system of steam and electric heating for the public rooms, state-rooms, and crew's accommodation is installed. Adjacent to the dining saloon are the kitchen, pantries, bar, baker's and butcher's shops, etc., all fitted with electrical and coal fired appliances of the latest type. Well equipped refrigerated store rooms are installed amidships on between decks for ship's use.

REFRIGERATION

The refrigerating machinery at forward end of shaft tunnel is electrically driven, and of large capacity so as to maintain the refrigerated store-rooms at the requisite temperatures.

Two electric silent running winches are installed at each of six large cargo hatches, and a special heavy derrick is fitted at No. 2 cargo hatch capable of lifting a load of 35 tons; in addition there are numerous derricks at masts and derrick posts.

The vessel is electrically lighted throughout, current being supplied by three powerful Diesel electric generators, placed in engine room. These generators also supply power to various auxiliary machines, deck machinery, etc.

A complete system of electric bells is fitted in state-rooms, public rooms, and other offices.

A projector for use in Suez Canal is arranged at stem.

An emergency dynamo, driven by a heavy oil engine for supplying power for night lights and wireless telegraphy, is fitted on boat deck aft.

Lifeboats, including two motor lifeboats, are carried under semi-rotary davits, one of the motor lifeboats being equipped with a complete wireless transmitting and receiving outfit.

The propelling machinery consists of twin sets of Fairfield-Sulzer Diesel engines, each engine having eight working cylinders 28 in. diameter \times 39 in. stroke, and together capable of developing 7,700 b.h.p. at 11 revolutions per minute.

Two 3 stage main air compressors for injection air are driven by crank at the forward end of each engine, and scavenging air is supplied by two British Thomson-Houston turbo blowers, each blower being capable of supplying the quantity of air required for two engines.

The auxiliary machinery is electrically driven, power being obtained from three 275 k.w. Allen Diesel generator sets.

A small Cochran boiler is also fitted for ship's heating and galley use.

COFFEE

EMPIRE SOURCES OF SUPPLY

BY

ALFRED S. BOOTH

(Concluded from page 462 issue of July 10, 1926)

The cultivation of coffee in Jamaica also goes back very many years, and Blue Mountain Jamaica has long been considered to be the last word where finest quality is required. The coffee is grown at a height of 3,000 to 5,000 feet above the level of the sea, and the greatest care is bestowed by the planter on its growth and preparation. Unfortunately, the vicissitudes to which the crop is exposed at such a height are a constant source of anxiety until the actual harvesting is finished. These difficulties are such as to preclude any material development in production; the quantity produced is very limited, 1,000 barrels of about 2 cwt. each net, or about 100 tons, being the outside weight annually of this description. The whole of this Blue Mountain Jamaica is shipped to Great Britain, and as supplies are so limited, exceptionally high prices are invariably paid. A considerable quantity of coffee is grown in the island (largely by natives) at lower altitudes, and in 1925 exports of coffee (other than Blue Mountain) from Jamaica totalled 104,407 cwt., of which very little came to Great Britain, the greater portion going to Canada, where it is admitted under a preferential duty. As still further preferences are being favourably considered by the Canadian Government for all the products of Jamaica, and a special service of steamers is being arranged from Canadian ports, the production of this grade of Jamaican coffee is likely to receive a healthy stimulus.

Coffee growing is also receiving attention in Trinidad. In 1899 the island exported only 670 cwt., but in 1925 some 5,300 cwt. were shipped. All Empire-grown coffee is admitted into Great Britain under a small preferential duty.

PROGRESS IN KENYA

Serious cultivation of coffee in Kenya Colony dates from 1903, when the Uganda Railway from Mombasa to Kisumu (Port Florence) on the Victoria Nyanza was completed. The pioneers in its cultivation were the Roman Catholic Fathers of the French Mission near Nairobi. The seed used is generally known as 'Bourbon,' which is simply a variety of *Coffea Arabica*, and the majority of the coffee plantations in Kenya have been established from seed first grown at the French Mission. For some years very little progress was made, and it was not until several planters had made a marked success of coffee growing that settlers began to realize its future possibilities. From 1912 onwards, however, progress has been more and more rapid. At that time, although Kenya or Nairobi (as it was then called) coffee showed every indication of fine quality, it generally had a strong fermented flavour which considerably limited its use. It was pointed out to the planters that this flavour was due probably to lack of care in the fermenting and washing processes, and that if it could either be greatly modified, or eliminated altogether, there was every reason to expect that Nairobi coffee would grow in favour and its consumption increase. 'A word to the wise was sufficient.' Greater care was given to the fermenting and washing processes and this obtrusive flavour has been

practically eliminated. To-day Kenya coffee shares with Costa Rica coffee the distinction of being the most favoured for general use in the United Kingdom. It has won its position solely on its own merits. The fact that the berry is on the small side rather militates against it, but its real all round quality outweighs all deficiencies in appearance.

The Great War naturally checked any increase in cultivation, but since 1918 the acreage under coffee in Kenya Colony has increased by leaps and bounds. In 1914 it was approximately 5,000 to 6,000 acres; at the end of 1925 it was at least 65,000 acres.

A word of caution is necessary here. Those who are thinking of planting coffee must bear in mind that it is not until the third year from the sowing of the seed that they begin to get any return on their outlay, and that from four to six years have to elapse before a material output is assured. In the sixth year the trees should be in full bearing, provided, of course, that there have been ordinarily favourable weather conditions. It is necessary, therefore, to have at least a capital of £3,000, and it is certainly desirable before beginning cultivation to acquire experience on some existing plantation.

HIGHLANDS OF KENYA

One other point must also be borne in mind—namely, the altitude at which coffee is grown in Kenya Colony. Nairobi itself is 5,400 ft. above the sea level, and the coffee-growing districts, which are practically on the equatorial line, are 4,000 ft. to 6,000 ft. The variations in temperature between the daytime and the night render it essential that the planter should have a thoroughly sound heart. Bearing these facts in mind, it only remains to be said that there is a large portion of Kenya Colony suitable for growing coffee still awaiting development. The soil is of wonderful depth, and the crops so far harvested show a yield per acre above the average of most coffee-growing countries: 5 cwt. of cleaned coffee to the acre for trees in full bearing may be taken as a fair average in a season, with ordinarily favourable weather conditions.

In 1912 coffee-growing prospects in Uganda seemed fully equal to those of Kenya Colony, and a considerable area was put under cultivation. The average altitude is from 4,000 ft. to 4,500 ft., but experience has shown that great care has to be exercised in selecting suitable soil. For several years all seemed to be going well, and then insect pests assailed the estates with extraordinary virulence. Of these pests the attacks of the *Antestia* bug were the most serious. To-day, owing to the adoption of well-proved methods of combating it, the *Antestia* is well under control.

In addition to the handicap of insect pests Uganda coffee also acquired a bad reputation on account of a certain flavour that sometimes developed after roasting, and came to be known by the term 'grassiness.' Planters have, however, strained every nerve to get rid of this objectionable flavour; special attention has been paid to the washing and drying processes, and it is satisfactory to be able to record that not only is 'grassiness' becoming rare, but that many of the estates are now sending really fine coffee—in every way satisfactory. The berry, too, is a good size, and has consequently attracted export demand. Uganda stretches right away to the Ruwenzori Mountains, and some of the coffee grown in that district, known

as Toro coffee, is of the finest quality. The difficulties of transport from the Toro district, however, have still to be overcome. Cotton-growing has militated most against the development of coffee cultivation in Uganda.

Coffee-growing in Tanganyika Territory, formerly German East Africa, naturally suffered a tremendous set-back during the Great War, but has since made a remarkable recovery. Its exports of coffee, including native-grown, in 1913 were 21,180 cwt.; in 1921 they totalled 76,557 cwt.; in 1922, 85,426 cwt.; in 1923, 80,937 cwt.; in 1924, 105,222 cwt.; and in 1925, 120,186 cwt. Of these quantities it is safe to take the proportion of native-grown as approximately two-thirds of the totals.

By far the largest proportion of the native-grown coffee comes from the Bukoba district, at the south-west end of the Victoria-Nyanza, exports in 1923 being 51,200 cwt.; in 1924, 70,700 cwt.; in 1925, 83,000 cwt.

THE BUKOBA DISTRICT

The native-grown coffee is mostly grown from the *Robusta* seed, the coffee from which is of a much lower quality than that grown from the *Arabica* variety, but it has certain advantages. It can be grown at a lower altitude; it is of a hardier nature and less liable to insect pest; and it produces a heavier yield per tree. At any rate, it is suited to the Bukoba soil and climate, and finds a ready market in the Sudan, Egypt, and adjacent countries. Comparatively little is shipped to Great Britain.

The remaining one-third of Tanganyika coffee is grown on the highlands of the Usambara, Kilimanjaro, and Arusha districts (the north-eastern area of the territory), nearly all of it from the *Arabica* seed, and it is of very good quality. A large proportion of it comes to Great Britain and finds a ready sale both for home consumption and export to the Continent. It is gratifying to note that a steady increase in production may be looked for year by year.

At one time great hopes were entertained that Nyasaland would be an important coffee-growing country, but the cultivation of tobacco proved a much more profitable investment. The Zambesi Industrial Mission are practically the only coffee-growers in Nyasaland to-day. The soil and climate are suitable in every way, and labour is abundant.

Except in the case of the fine Blue Mountain Jamaica, part of which goes to Liverpool, nearly the whole of the coffee (and practically all the British Empire-grown coffee) imported into Great Britain comes to London. It is offered at public sales. Raw samples are obtained before the sales take place; these are carefully roasted and tasted and afterwards bid for in the public auctions. The actual buyers are represented by buying brokers, so that their names are not disclosed.

The aim of the ultimate distributor is to give the consumer the very best possible quality, and it is satisfactory to know that purely on its own merits the reputation of Kenya coffee is only equalled by that of Costa Rica, and these two descriptions are the main contributors to the finer blends sold here.

'The Times Trade and Engineering Supplement.'

A PLANTER ABROAD

A TOUR THROUGH WESTERN EUROPE

PERSONALLY CONDUCTED BY

JAK-MAK-EYE

If your income runs into thousands per annum, if you have a passion from architecture, if you are a keen student of ethnology, if you desire to attain that peace of mind which only a Baedeker can give—do not read this. Herein you will find the great made small, and the small made great. We may take you to places marked 'doubtful' in the map of respectability—but we shall bring you back safely. We may dilate on unimportant matters, and belittle the important ones. We may muddy the well of erudition with the stick of ignorance—but it will all come right in the end. It always does, or did.

The ideal method of starting on a tour such as ours is to fly to Paris from London. If you can arrange a leave-taking of Town which includes, say, 'Romano's,' a theatre, and 'Murray's', so much the better. You will be in good form for the flight. And a good start is everything.

On arrival at the aerodrome at Croydon, be sure to investigate at once the contents of the tiffin basket provided, for perhaps like us you do not consider two tiny bottles of Port the true affinity of sandwiches. We had some small gift of organization, and found that at little expense, and with little delay, it was possible to lay in a stock of Bass. You will observe that we are not of the aesthetic order. We are Planters!

You must be careful to choose a 'plane with an air-tight fusilage. Ours was holely in sundry places, and we found the draught up aloft considerable, as you can imagine. It is not advisable to hold opened bottles between your knees, as we did, for the pilot may unexpectedly shut off his engines, make the plane lurch, your heart come up so that you have to swallow hurriedly many times to keep it with you, and your Bass upset over your legs. Ours did, and by the time we reached Paris, we were frozen nearly stiff. Perhaps Port was more suitable—there was less of it to wet us. We slept most of the journey over, which is perhaps more than you will be able to do.

You may or may not be allowed to smoke on the journey—it depends on the use of the correct password to the pilot (see Appendix)—and strolling about on the wing surfaces is not encouraged. We understood that the French (ours was a French plane) are very careful of their French polish, and do not like it hobnailed. You are allowed a certain amount of luggage, but pianos, cases of tea, and the like are looked at askance by the authorities. However, being planters, pyjamas and tooth kit was all we required, also a flask known as 'Wee Jimmy'.

It is not considered good form to throw out your empty Bass bottles, even over the Channel, although you may have found this habit accepted at Home in the best char-a-banc society. Keep the bottles to present, with a small tip, to the porters at the Paris aerodrome. With a winning smile and a few kind words (see Appendix), you may even find them useful in establishing that cordial feeling which Customs men delight in. Your large stock of tobacco and cigarettes, very necessary if your tastes are insular, will cause you no trouble.

And now let us pass on to Paris. For the scenery during the flight beggars description.

Paris, voila ! Paris is the capital of France. We do not grudge it the distinction. Poets have sung of the Champs d'Elysées and the Bois. But we are planters and not poets, nor do we sing, except in the seclusion of the bath. For us, upon a raw wet night in November, a certain café in the Rue des Capucines—the 'Café Americaine'—provided us with all the sights we wished to see. Certainly the Rue de la Paix is worth a visit, if your taste lies in expensive and seductive jewellery, but for planters, no ! We left the merchants of that historic thoroughfare wealthier only by the price of a dozen pipe cleaners and a pipe of doubtful shape, which, though guaranteed never to go out in rain or wind, has not yet been persuaded to function. Perhaps during the monsoon, we may give it another trial.

It is a sound policy, when in doubt as to the way about, to ask a policeman. We did so, and are still in doubt, for our Tamil pained him, and his French pained us. The police in Paris are exceedingly obliging—nor are they the only people gifted that way. *Honi soit qui mal y pense*. It is possible, however, to wander quite a long way before you get, say from the Gare de l'Est (where it is advisable to leave your luggage immediately you reach Paris) to the Place de la Madeleine. While doing so, you can observe the architecture both human and otherwise. We confined ourselves strictly to the human, and found it intensely absorbing. Tea can be procuree in Paris, but it is as scarce as hens' teeth ! The coffee is good, and the brandy beyond speech. At least we found it so—though it took some time.

Having carried out this interesting itinerary (see Appendix) we would advise you to return to the Café Americaine. Here you will receive every attention, and the orchestra of three will oblige with anything from Paderewski's Minuet to the Valencia. You will be well and truly fed, which is incidental, and they will not call the police if you ask for a whiskey or brandy and soda, which is gratifying. The management will readily take upon themselves the responsibility of seeing that you catch your night train. And on you go. You have seen Paris.

Have you seen the Wagon Lit de luxe which runs from Paris to Buda Pest ? No ? Allez donc, avec nous ! We assume your berth is booked. If it is not, yours will be a rough passage.

The designer of the Wagon Lit compartment is supposed to have got his idea from the sight of a bijou residence which had been telescoped by an earthquake. Everything in the way of furniture is there, even down to spittoons, and hooks on which to hang false teeth. What does not appear at a glance may be discovered by pressing buttons, pulling levers, and lifting or dropping flaps. A Wagon Lit must fulfil a railway signalman's idea of Paradise.

We climb into the sumptuous apartment, and after exploring all knobs and their functions, fall asleep. A species of alleged soda water can be obtained from the conductor which, adequately diluted, will ensure any insomnia sufferer a good night's rest. We awake to a chilly dawn at Basle on the Swiss frontier.

Basle is famous for a number of things (see Appendix), but our main interest was in the Buffet—a most interesting place, in modern Byzantine style, full of neat and working jaws. We added to the tumult *via* ham and eggs, and on we went. Most interesting place Basle, what ?

Switzerland is famous on account of William Tell, dud watches, condensed milk and winter sports. We saw none of these things. The mountains are high, much too high to grow tea, and we thought the jungles tame looking things, not at all suitable for rubber. The St. Gothard tunnel is a marvel of engineering skill; so is the food consumption of the average Continental male on a long journey in a cold climate. Audible feeding has a Loud Speaker well beaten.

We passed the Lake of Lucerne, with Mount Pilatus just as usual and there are places with most interesting names *en route* like Flueln and Rigi. At such we got out to breathe: rather a difficult process in the oven-like heat of the De Luxe outfit. No one came with us to breathe, so we got all the Swiss air we wanted free. Yodelling seems to be a lost art, for we never once caught sight of artistic goatherds, leaping from crag to crag, and 'from precipice to precipice,' yodelling the while. The chamois was conspicuous by its absence, and altogether the lack of local colour was distressing. We trust the authorities will make a note of this. Throughout the day we passed mountains and lakes, and so on to Bellinzona and Chiasso. We mention the first as we stopped there for quite twenty minutes, and admired the Swiss fashions in girder bridges, overhead wires, and station buildings. It is a mistake to think that the Taj Mahal is the last word in architecture—it is not. Swiss stations have it entirely smothered.

Chiasso is the frontier station. It also, we do not grudge its distinction. Here vociferous Cook's men grab your kit, hustle you into a refreshment room, demand tickets, passports, birth certificates and V-A's reports and depart. You snatch a meal (for you never know when you may have to run), and sally forth to parade before a swart, cynical, leisurely individual, who looks you over, sums you up, and passes you on. A word of caution is needed. A station master hereabouts is as important as a Coast Agent. Should you walk into his office wearing your hat (it may be quite a nice one), and possibly smoking a cigar (which may be quite fragrant), and bray in *his* ear, you will probably go out on *yours*. You must remove said hat and cigar, modulate your intonation, and if he likes your looks, he will attend to your wants. We discovered this when found ourselves outside his office, and on the wrong side of the pigeonhole. The Cook's man was in tears. 'No! no!' said he, 'Sacred name of a sky blue rabbit; that is notta thee way to treat thee Capitaine' No! Diable!!!

In Chiasso you can buy a drink—if you are wealthy. If you are a planter, you can get a mineral water at a quarter lira per bottle. Should you desire to see your friends again, however, it is inadvisable to be reckless, even to the extent of a quarter lira. Having no such desire, we tried it, and fortunately (and through having copper lined innards) have survived.

The Italian Lakes occupied our attention for several hours, and believe us they are just as you see them on chocolate boxes and mouth organ cases. You are now in Italy. That is Lugano, with the lake beyond. Is it not a large expanse of water? It is—far more than you could ever drink. Yes, you are now in Italy. It is obvious, for every one is in uniform. The landscape is overrun with cloaks, baggy breeches, and fierce moustaches. Yes! it is the land of uniforms and spaghetti.

If you are lucky, and there are no collisions, land slides or avalanches, you should arrive in Milan in the evening.

(To be concluded next week)

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending July 10, 1926
Bank Selling Demand Draft on London

5th	6th	7th	8th	9th	10th
17 7/8d.	17 7/8d.	17 7/8d.	17 7/8d.	17 27/32d.	17 27/32d.

II. Summary of latest Market Reports and Prices to hand :—
(a) Some of the higher London Prices—

Best prices realized on the
London Market

Average prices obtained for tea

Mark	Pkgs.	Price	District	Week ending June 19, 1926	January 1 to June 19, 1926	January 1 to June 19, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING JUNE 19, 1926)			N. India.	1 7.65	1 8.97	1 5.63
			S. India	**1 7.64	††1 9.45	††1 6.55
			Ceylon...	1 7.92	1 10.10	1 8.12
			Java ...	1 4.74	1 5.45	1 0.94
			Sumatra.	1 4.60	1 7.21	1 4.34
			Nyassa- land.	Nil.	1 6.45	1 2.08
			Total ...	*1 7.37	†1 8.98	†1 5.98
(B) COFFEE						
London Prices (seven days ending June 22, 1926)						
				bgs.	s. d.	Grades.
(a) Mundakayam—			(a) Coorg—			
Yendayar ...	99	1 6	Eldorado ...	86	145 7	1,2,3, P. B. & T.
(d) Nilgiris—			Faith ...	33	140 3	Do.
Prospect ...	259	1 10	(b) Mysore—			
Nonsuch ...	151	1 9½	O. Hospet ...	30	139 9	Do.
Ibex ...	69	1 9	H. C. S. S....	12	139 9	Do.
Woodlands ...	102	1 8½	H. C. S. I....	18	138 6	Do.
(e) Niligiri-Wynaad—			C. D. ...	23	134 3	Do.
Daverashola ...	60	1 8	(C) RUBBER			
Seaforth ...	102	1 7	The London 'Spot' quotation for Plantation first Latex Crepe on Tues- day, July 13, 1926, was 20½d.			
(f) South Travancore—						
Braemore ...	31	1 6½				
Poonmudi ...	57	1 6¼				

** Based on 3,992 packages

†† „ „ 79,646 „

‡ „ „ 85,388 „

* Based on 81,572 packages.

† „ „ 1,508,767 „

‡ „ „ 1,292,266 „

(b) *Précis of Reports on the London Market received on Monday, July 12, and covering the seven days ending Tuesday, June 22 :—*

(1) *Tea.*—As is shown on the previous page, the average for the week ending June 19th was only 1s./7·64d. ; as against 1s./8·08d. and 1s./9·23d. for respectively the weeks ending June 12th and 5th. In other words there has, of late, been a drop in prices ; but on the other hand we learn that there was good competition at the decline, which still marks a figure of about 2d. above the prices ruling at the corresponding date of last year. On Tuesday the 22nd—the last of the seven days under review—there was a further drop of from ½d. to 1d. a pound on the previous week's prices for South Indians ; the quality of which is reported to be showing a distinct falling off. The bonded stocks of tea in the United Kingdom on 31st May, 1926, were 163,408,000 lbs. against 188,964,000 lbs. and 150,251,000 lbs. on the same dates in respectively 1925 and 1924 and 179,891,000 lbs. on the 30th April 1926. While it is, of course, eminently satisfactory to note that the bonded stocks are some 25½ million pounds below last year's figure ; it must, on the other hand, be remembered that there were probably very heavy clearances from Bond in anticipation of the General Strike and that, therefore, the stocks in the distributors' hands are probably at present unusually large. Messrs. McMeeken and Co. indeed estimate that the distributors' stocks are some 10 million lbs. above normal ; and that the balance of the 25½ million lbs. deficit referred to above may quite possibly be discounted by increased production especially in Northern India, Java and Ceylon. This is probably unduly pessimistic, but it is as well to hear all sides of the case. It has got also to be remembered that Java which suffered from a severe drought last year is now making exceptionally heavy sales, which may to some extent influence the price of medium tea during the next few months.

(2) *Rubber.*—'Spot' was firmer by about ½d. and remained round about 1s./9d. while stocks increased by 383 tons to 22,664.

(3) *Coffee.*—There was keen competition for the Indians on offer and the prices obtained are shown on the previous page.

III. Weekly Rainfall Statement

From Sunday, July 4, 1926, to Saturday, July 10, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	10·63	26·41	37·04	19. Naduvattam	31·98	9·78	41·76
2. Kalthuritty.	8·71	38·91	47·62	20. Coonoor ...	1·99	5·05	7·04
3. Tenmalai ...	N.R.	42·61	N.R.	21. Kotagiri ...	2·59	10·79	13·38
4. Mundakayam.	7·54	38·12	45·66	22. Ootacamund	4·99	15·47	20·46
5. Peermade...	15·80	47·61	63·41	23. Yercaud ...	1·34	18·31	19·65
6. Twyford ...	15·14	56·36	71·50	24. Devala ...	34·08	25·50	59·58
7. V'periyar ...	13·99	19·43	33·42	25. Gudalur ...	25·45	11·71	37·16
8. Kalaar ...	18·39	41·75	60·14	26. CALICUT ...	16·80	38·24	55·04
9. Chittuvurrai	2·43	13·19	15·62	27. Kuttiyadi ...	25·04	40·03	65·07
10. BODI'KANUR	0·63	3·71	4·34	28. Vayittiri ...	58·84	29·98	88·82
11. COCHIN ...	7·33	50·37	57·70	29. Manantoddi.	21·60	14·20	35·80
12. Mooply Valley.	14·89	44·95	59·84	30. Billigiris ...	3·51	10·40	13·91
13. Pachaimalai	15·14	26·79	41·93	31. Sidapur ...	18·89	15·12	34·01
14. Mudis ...	25·94	53·34	79·28	32. Pollibetta...	32·00	13·02	45·02
15. Nell'pathy...	10·37	14·64	25·01	33. Somwarpett	13·30	6·23	19·53
16. POLLACHIE.	2·29	5·41	7·70	34. Ballupete ...	13·02	6·75	19·77
17. Manjeri ...	29·14	25·25	54·39	35. MANGALORE.	10·16	37·36	47·52
18. Nilambur ...	29·77	22·89	52·66	36. MADRAS ...	1·66	0·65	2·31

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 31] SAT., JULY 31, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	497	C—M.P.A. ...	504
U.P.A.S.I. Annual Meeting ...	498	D—A.P.A. ...	506
Ben. Fund „ „ ...	498	Letters to Editor—	
The U.P.A.S.C. ...	499	W.P.A. Secretaries ...	515
District Association Meetings—		‘Grassy’ Coffee ...	516
A—N.W.P.A. ...	500	G. S. O.'s June Report ...	517
B—C.T.P.A. ...	502	Commercial and Meteorological.	519

EDITORIAL NOTES

We would draw special attention to the contribution to Wynaad Planting History made by Mr. Waddington in the letter which we publish on page 515.

The report of The Seychellan Agricultural Department for the year 1925, which has reached us this week, states that 10,895 lbs. were exported during the year. The Director, Mr. P. R. Dupont, deplores the ‘unjustifiable wholesale cutting out,

except on half a dozen estates, of the rubber trees in the Colony’ to supply firewood for the working of distilleries; as he maintains that small holders should have been given every encouragement to develop an industry which would bring good profits to them since they could produce a pound of rubber for 3/10ths of an Indian Rupee. The patches of good soil suitable for rubber are, he says, too scattered ever to allow the opening of large estates.

The following table shows the average price of ‘Spot’ first grade plantation rubber for each of the fourteen completed quarters and each of the three completed years which have elapsed since the introduction of the Stevenson

Restriction Scheme:—

EXPORTABLE ALLOWANCE AND AVERAGE PRICE FOR EACH RESTRICTION QUARTER

Restriction Quarter commencing	Exportable allowance of Standard Production Per cent.	Average Price s. d.	Restriction Quarter commencing	Exportable allowance of Standard Production Per cent.	Average Price s. d.
Nov. 1, 1922	... 60 ...	1 2·285	Aug. 1, 1924	... 55 ...	1 2·632
Feb. 1, 1923	... 60 ...	1 4·858	Nov. 1, 1924	... 50 ...	1 5·998
May 1, 1923	... 65 ...	1 2·242	Feb. 1, 1925	... 55 ...	1 7·356
Aug. 1, 1923	... 60 ...	1 2·994	May 1, 1925	... 65 ...	3 2·469
Nov. 1, 1923	... 60 ...	1 2·175	Aug. 1, 1925	... 75 ...	3 7·269
Feb. 1, 1924	... 60 ...	1 0·917	Nov. 1, 1925	... 85 ...	3 10·708
May 1, 1924	... 60 ...	0 10·974	Feb. 1, 1926	100	2 4·013
Average Price 1st Restriction year	...	...	Nov. 1, 1922–Oct. 31, 1923	...	1s. 3·076d.
“ “ 2nd “	...	...	Nov. 1, 1923–Oct. 31, 1924	...	1s. 1·070d.
“ “ 3rd “	...	...	Nov. 1, 1924–Oct. 31, 1925	...	2s. 5·773d.

THE UNITED PLANTERS' ASSOCIATION OF SOUTHERN INDIA

(INCORPORATED)

Annual Meeting, 1926

NOTICE IS HEREBY GIVEN that the Thirty-third Ordinary General Meeting of the Members of the above named Association will be held at the Mayo Hall, Bangalore, on Monday, August 23, 1926, commencing at 2.30 o'clock of the afternoon and continuing on the following days, for the purpose of receiving the Report of the Executive Committee, Accounts and Balance Sheet, electing a Chairman and Auditors for the ensuing year, and Special Business as set forth in the statement of Agenda printed below.

By Order of the Executive Committee

MADRAS,
July 20, 1926. }

(Signed) H. WADDINGTON,
Secretary.

AGENDA

Ordinary Business—

1. The Chairman's Address.
2. Report of the Executive Committee.
3. Accounts, 1925-1926.
4. Election of Chairman and Auditors.

LABOUR DEPARTMENT AND LABOUR

20. The Director's Report.
21. Labour Rules and By-Laws.
22. The Labour Department.
23. Reduction of Advances.

Special Business—

THE U. P. A. S. I.

5. The U. P. A. S. I. Rules.
6. Employees' Scale of Pay and Allowances.
7. European Employees' Provident Fund.
8. Indian Employees' Provident Fund.
9. *Planters' Chronicle*.
10. S. I. P. Benevolent Fund.
11. U. P. A. S. I. Sports Club.
12. Upasi Buying Agency.
13. Political Representation.
14. Affiliated Associations.

LEGISLATION

15. The Planting Member.
16. Labour Laws.

COMMUNICATIONS

17. Harbours.
18. Railways.
19. Roads.

GENERAL

24. Land Assessment and Settlement.
25. Pilferage of Estate Produce and Goods.
26. Export of Indigenous Manures.
27. Wireless Installation.
28. Roll of Honour.
29. Tea.
30. Coffee.
31. Rubber.

SCIENTIFIC DEPARTMENT

32. General.
33. Tea.
34. Coffee.
35. Rubber.

BUDGET AND FINANCE

36. 1926-1927.

Southern India Planters' Benevolent Fund

(Registered under Societies Registration Act, 1860.)

NOTICE IS HEREBY GIVEN that the Third Annual General Meeting of the above named Society will be held at the Mayo Hall, Bangalore, on Thursday, August 26, 1926, commencing at 10.30 o'clock in the forenoon.

AGENDA

- (1) The Secretary's Report.
- (2) Accounts.

July 23, 1926.

H. WADDINGTON,
Secretary

U.P.A.S.I. SPORTS CLUB

VENUE OF MEET FOR 1927

Mr. Fulcher has asked all delegates to the Upasi Meeting in Bangalore next month to bring instructions from their districts on this subject; and, to enable them to do so, I think it would be as well if I tried to give members some idea of the work involved in running our Sports 'Week,' and what a change of Venue would involve.

Firstly, our Honorary Secretary is unable to take charge of the work if the Meet is to be at Coonoor; and those residents of Ootacamund who have done so much for us in the past as an Entertainment Committee would have to be replaced. Hence a new Entertainment Committee, and an Honorary Secretary for it, would have to be found.

Their chief duties would be:—

1. Arrangement with hotels and boarding houses regarding fees and accommodation, and the booking of the latter.
2. Arranging Honorary Membership of the clubs, and providing list of members.
3. Arrangements for entertainments; the printing of admission tickets, and invitation cards, etc.
4. Arrangements for the children's fancy dress, and Mr. Murphy's, dance, with complete list of Residents to be invited.
5. The asking for prizes, and the issue of courtesy invitations to the high Officials.
6. Decorations for all shows, and obtaining materials for the same.
7. Engagement and accommodation of the bands.
8. Police arrangements for all shows.
9. Catering contracts for Cricket lunches and Dance suppers.
10. Making out programme for the Week, fitting in Cricket and Footer matches and the two tournaments; and printing and posting the same.
11. Issuing of Membership admission tickets.
12. Clearing up after the Meet, seeing that all bills are paid, etc., etc.

I think I have said enough to show that an energetic Honorary Secretary and Committee will be required, as at Coonoor they will be breaking new ground.

The cricket patch at Coonoor (matting on the polo ground) is of course nothing like as good as the one at Ootacamund on which we have spent a lot of trouble and money; but on the other hand I think the Coonoor Club tennis courts are better than those at the Ooty Gymkhana Club.

This letter may appear as if I was against making any change; but that is by no means so as personally I find the Ooty climate a bit trying in my old age. All I want, and all the Committee want, is for our Sports Week in 1927 to be an even bigger success than its predecessors; and we will do our best to make it so wherever the members may decide that it is to be held.

AUDA TODE ESTATE,
PERINDOTTY P.O.,

July 21, 1926.

B. M. BEHR,
President,
U.P.A.S.C.

U.P.A.S.I. SPORTS CLUB—(continued)

ANNUAL SUBSCRIPTIONS.—Are now due.

These should be paid direct to the Secretary, Upasi, Madras, through the Club Representative in each district.

RATES—

Life Membership	...	...	...	Rs.	150
Salaries, Rs. 1,000 and over	...	...	...	"	25
„ Rs. 500 and under Rs. 1,000	...	...	...	"	15
„ Under Rs. 500	...	...	...	"	5

District Representatives should furnish the Secretary of the Club with a copy when sending subscriptions into Madras.

Membership Application forms have not been printed this year ; being hardly considered necessary for circulation to annual subscribers. It is however necessary, that when a new member joins, he must do so through his District Representative, who must satisfy himself that the applicant is a member of a District Association.

DELEGATES TO BANGALORE.—District Representatives are requested to see that delegates are instructed by members regarding :—

VENUE OF 1927 MEET AND MONTH THEREOF

REMINDER.—Competitions during Conference Week.

DEWAR GOLF CUP and Inter District RUSSIAN BILLIARDS.

Entries should be expedited : Very few have yet been received.

A COMMITTEE MEETING will be held at the West End Hotel, Bangalore on Sunday, the 22nd prox. at 9 p.m. Any District Representatives present in Bangalore are requested to attend.

MADRAS RUGGER TOURNAMENT AND CRICKET MATCH IN OCTOBER.—Names of members wishing to play in either team should be sent in prior to above Committee Meeting to be held at Bangalore.

WOODBRIAR ESTATE, DEVERASHOLA,
15th July, 1926.

G. W. FULCHER,
Honorary Secretary.

DISTRICT ASSOCIATION MEETINGS

A. THE NILGIRI WYNAAD PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Gudalur Rest House,
at 11 a.m., on July 19, 1926.

Present

Messrs. J. Aird (*Chairman*), R. Fowke, G. W. Fulcher, P. W. Davis, A. Foote and F. H. Farmer (*Honorary Secretary*).

Before proceeding with the business of the Meeting Mr. Aird thanked the Members of the Association for having elected him Chairman for the year 1926-27.

Notice convening the Meeting was read.

Proceedings of the Last Meeting were taken as read.

Planters' Roll of Honour.—The Preliminary Roll as circulated by the Secretary of the U. P. A. S. I. was put before the meeting ; and the suggestion of the Executive Committee read over. The Meeting approved of the proposal for the Roll of Honour. Additions and corrections to the preliminary list were noted.

Association Accounts.—The accounts were placed on the table. The Honorary Secretary explained how the U. P. A. S. I. Sports Club was in

credit to the extent of Rs. 15. He was instructed to forward this amount to the Treasurer of the Sports Club. The accounts were then passed.

Appointment of Auditor.—Mr. Fowke drew the attention of the Members to the excessive amount paid by the Association for the Annual Audit, with the suggestion that it should be reduced. The Meeting agreed with his opinion; and the Honorary Secretary was instructed to enquire of Mr. Gopalaiyer whether he would be willing to undertake the work for less remuneration.

U. P. A. S. I. European Employees' Provident Fund.—After discussion of Rules No. 9 and 15, which were brought to the notice of the Meeting by Mr. Fulcher, the rules were approved.

Labour Control Committee, Mysore.—Mr. Aird in addressing the Meeting on the activities of the Mysore Committee expressed in strong terms his dissatisfaction at the lack of interest shown by other Districts in the work of the Committee; as at the last Meeting two Members were absent.

The Meeting warmly supported Mr. Aird in his condemnation, and it was decided that the opinion of the Meeting be sent to the Associations concerned.

Coimbatore.—Mr. Farmer informed the Meeting on the current work of the Coimbatore Control Committee.

Scientific Officer's Tour of the District.—The Committee of the Association at a Meeting on June 30 considered the matter of Mr. Munro and Dr. Shaw cancelling their tour to this District. The record of this was read over to the Meeting which expressed approval of the action taken.

Estates' Legal Adviser.—The matter was discussed at length; and the Honorary Secretary was instructed to get into communication with the proposed Vakil to ascertain what terms he would be willing to accept.

Wynaad Re-settlement Survey.—A letter from the Honorary Secretary to the Collector of the Nilgiri District was read. No reply having been received, the matter was left over until the next Meeting.

U.P.A.S.I. Annual Meeting and Instructions to Delegates.—Mr. Fowke proposed, and Mr. Davis seconded, that full powers be given to the Delegates to act in the interests of the Association.

Carried.

New Members.—Mr. Fowke proposed, and Mr. Davis seconded, that Mr. D. T. Merson of Caroline Estate and Mr. R. M. Morrow of Wentworth Estate be made Personal Members of the Association.

Carried unanimously.

The Honorary Secretary was instructed to write to Mr. Whittle who wishes to become a Member.

Correspondence and other Competent Business.—

The following letters on Roads between the President, Nilgiri District Board and the Honorary Secretary were read:—Ref. B-127/26 dated June 26, and July 1, and 902 E of June 26, and July 16.

The following resolution was proposed by Mr. Fowke and seconded by Mr. Fulcher:—

This Association views with grave concern that no metal at all has yet been collected between Charambadi and Choladi; and on other roads in the District the ordinary maintenance metal has not been fully collected. In view of the additional allotment granted the Association considers that immediate steps should be taken to expedite the collection and spreading of metal on the roads in this District so that same may be completed by September 30.

Carried.

Read letter from Mr. J. W. G. Bisset of July 5 on Land held on Cowle Tenure—Letter No. 1542/2 of June 28 from the Collector of the Nilgiris.

Scientific Department.—The proposed scheme for the Re-organization of the Scientific Department was read over. Member spoke in support of scheme which was generally approved.

Attendance.—Those present expressed considerable disappointment that more Members did not find it possible to attend the Meeting, more especially in view of the importance of several of the items of the Agenda.

With a vote of thanks to the Chair the Meeting terminated.

F. H. FARMER,
Honorary Secretary.

J. AIRD,
Chairman.

B. CENTRAL TRAVANCORE PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the First (1926–27) Quarterly General Meeting held at Vandiperiyar Club on Saturday, July 10, 1926, at 10 a.m.

Present

Messrs. E. C. Sylvester (*Chairman*), A. R. St. George, T. A. Kinmond, R. J. McMullin, B. P. Tailyour, M. C., R. F. Vinen, J. S. Wilkie, H. Clarke, J. F. Fraser, H. Gibbon, W. B. Glenie, O. W. Horrocks, T. M. Lewis, A. Mactavish, C. J. Madden, C. Paterson, R. B. Webb, G. S. Napier-Ford (*Honorary Secretary*).

Visitors

Major R. E. Webb, O. B. E., and Mr. A. H. Mackie.

Notice.—The Honorary Secretary read the notice calling the meeting and the agenda.

1. *Minutes.*—The Minutes of the Annual General Meeting held on April 24, 1926, at Peermade Club, were taken as read and confirmed.

2. *Correspondence.*—Was read.

3. *District Telephones.*—There was nothing further to report under this heading.

4. *Labour Department.*—The Director's report for the year ending March 31, 1926, was distributed to all members present.

Srivilliputhur Division.—Mr. Tailyour explained to the Meeting the reasons for the Srivilliputhur Control Committee's resolution at the last Meeting with regard to 'Restriction of Kanganies' Recruiting Areas.' The matter was discussed and our member of Coimbatore Control Committee was requested to bring this up at the next Meeting.

Mr. Mackie explained that the Nellakottai Recruiting proposals referred only to 'all that part of the Nellakottai Taluq west of the Railway' and answered several questions which were put to him. The Chairman welcomed Mr. Mackie's presence at the Meeting, and a vote of thanks was accorded to Mr. Mackie for attending.

Palamcottah Division.—Mr. J. S. Wilkie explained that he was unable to attend the Palamcottah Control Committee Meeting as it had been fixed for July 10, and therefore clashed with the current Meeting.

Our Member-in-waiting was unable to go to Quilon for this Meeting, so that we were not represented. Some discussion took place with regard to more notice being given of Control Committee Meetings, and it was decided to leave the matter in the hands of Control Committee Members.

Coimbatore Division.—The Honorary Secretary read notice calling Control Committee Meeting for the July 28, at Coimbatore Club. Mr. Clark, Control Committee Member, signified his intention of attending the Meeting.

5. *Planters' Benevolent Fund.*—The Chairman informed the Meeting that 15 members had not as yet paid their subscription, and appealed to all members to send in their subscriptions without giving the Honorary Secretary the unnecessary trouble of sending out reminders. The Honorary Secretary read letter from Secretary, U. P. A. S. I., with regard to grant to Mrs. H. B. Kirk.

6. *Grant-in-aid Roads.*—Read letter from the Chief Secretary to Government stating that the Dewan might not be able to visit Peermade but would carefully consider anything the Association might write on the subject. The Meeting decided that a report should be made giving full reasons for and figures in support of resolution on this subject passed at the last General Meeting. The Honorary Secretary was instructed to write to the Chief Secretary to Government on receipt of this report, sending him a copy of the resolution above referred to and the Road Committee's Report in support thereof.

7. *Election of and Instructions to Bangalore Delegates.*—Messrs. R. J. McMullin and B. P. Tailyour were unanimously elected as Delegates to the Annual General Meeting of U. P. A. S. I., to be held at Bangalore commencing of August 23, 1926. The Chairman went through the Agenda for this Meeting, and the following instructions were given to the Delegates.

No. 5, U. P. A. S. I. Rules.—The following resolution was proposed by Mr. Tailyour and seconded, by Mr. Napier-Ford.

'That a book of standing instructions be drawn up and printed for use in the Labour Department and that copies be circulated to all subscribers. This book should be in 2 sections as follows:—

(1) U. P. A. S. I. Rules. Departmental Rules and Inter District Rules.

(2) Procedure between (a) Labour Superintendent and his Agents, (b) Labour Superintendent and Estates.'

Carried.

No. 9, U. P. A. S. I. Sports Club.—Read letter from Mr. Inman, drawing attention to the resolution passed at the Annual General Meeting of Kanan Devan P. A. on May 1, 1926, 'that the Venue of Planters' Week be changed from Ooty to Coonoor.' After some discussion the Chairman put this to the vote; and it was decided that our delegates be asked to support Ooty as the venue for Planters' Week, 1927.

No. 18, Roads.—Our delegates were instructed to again bring up the disgraceful state of Kuruvanuthu-Periyakulam Road: pointing out the enormous handicap this is to our district. The Chairman promised to supply toll figures for this section of the Road.

No. 21, Labour Department.—Our delegates were instructed to propose that the Madras Civil Service Standard be adopted for the Tamil Examination of the Labour Superintendents.

No. 28, Tea Specialist.—Our delegates were instructed to support the Executive Committee's recommendations as per circular from Secretary, U. P. A. S. I., dated July 3, 1926.

Mr. McMullin urged the need for a Tea Experimental Station in our District with particular reference to Helopeltis and offered to give up to five acres of Tea for this purpose. The Chairman informed the Meeting of very interesting experiments carried out by Doctors Shaw and Brittain at Granby and Arnakal where bushes affected with Helopeltis were sprayed with Calcium Cyanide with marked success.

With a vote of thanks to the Chair and to the Honorary Secretary, Vandiperiyar Club, for the use of the room, the Meeting terminated.

G. S. NAPIER-FORD,

Honorary Secretary.

E. C. SYLVESTER,

Chairman.

C. THE MYSORE PLANTERS' ASSOCIATION

(INCORPORATED)

The Proceedings of a Quarterly General Meeting held at the Kadur Club, Chikmagalur,
on Thursday, July 8, 1926

Present

Mr. C. Lake (*Chairman*), Messrs. S. H. Dennis, T. Gillespie, G. S. Homewood, R. C. Lake, K. T. Sheshaiya, B.A., LL.B., N. C. Whitton, E. H. Young and M. A. de Weck (*Secretary*).

The Notice calling the Meeting was read and confirmed.

Before proceeding with the business of the Meeting, Mr. Lake said he wished to thank the Meeting for having done him the honor of electing him Chairman. He regretted that he had been unable to attend many Meetings during the last year, but assured the Meeting that he would do his best to further the interests of the Association.

The Minutes of the last Meeting were taken as read and confirmed.

Election of New Members.—Proposed from the Chair, 'That Mr. Gillespie as representing Baithney Estate, be elected a member.'

Carried unanimously.

Proposed by Mr. Young, seconded by Mr. R. C. Lake, 'That Mr. G. M. Easton, as representing Soondhully Estate, be elected a member.'

Carried unanimously.

The Secretary read correspondence with Mr. S. L. Mathias with reference to his becoming a member. The Secretary was instructed as to what reply he should make.

Accounts 1925-26.—The Balance Sheet for 1925-26, copies of which had been sent to all members, was presented for confirmation. The Secretary, after explanation of the outstandings due on account of certain estates, was instructed to write off these amounts. The Balance Sheet was then passed.

Coffee Cess and Experimental Station, Mysore.—

Coffee Cess. The position of certain estates with regard to the levy of this cess having been explained, it was decided that the Secretary, after having obtained details from the Managers of such estates, should draft a letter to Government which he should submit to the Executive Committee for approval.

Experimental Station. The Chairman explained the present position. It was resolved that, subject to leave being obtained from the Director of Agriculture, Mysore, Mr. Friend of Guntanaik Estate be asked to inspect the Station and submit a detailed report for the information of the Delegates attending the U. P. A. S. I. Annual General Meeting at Bangalore.

Coffee Curing Works.—Read letter from the Secretary, Board of Agriculture, requesting the opinion of the Association in the matter of the desirability of starting a Coffee Curing House in some suitable place in the coffee growing area in the State. It was resolved, 'That this Association has no data upon which to form an opinion; and that, until Government make further investigations with regard to persons likely to take up such business, this Association is unable to express an opinion in this matter.'

Charmadi Ghaut Road.—Correspondence with Mr. S. L. Mathias, with regard to the state of this road was read. Mr. Whitton informed the

Meeting that he had travelled recently over this road, he said that he had never seen a road in worse condition; and that with its boulders and wash-outs, it was more like a river bed than a main road. Mr. Whitton proposed and Mr. Young seconded, 'That the Secretary again invite the attention of the South Kanara District Board to the deplorable state of the Charmadihaut Road, and that he request them to have put in hand immediately the repairs to this road.'

Carried.

It was resolved that the Delegates to the U. P. A. S. I. Annual General Meeting request the U. P. A. S. I., to take up this question.

Act 1 of 1903.—Read letter from Mr. Dennis in which he asked if, taking into account recent developments in this matter, he should attend any further meetings of the Committee constituted to consider and make recommendations with regard to the amendment of his Act. It was decided that the matter be left in the hands of the Committee appointed to deal with it.

Indian Employees' Provident Fund.—Copies of the scheme had been sent to all members. It was resolved that this Association is in favour of the scheme.

Terms of Employment of European Employees.—Read letter dated May 7, from the Secretary, U. P. A. S. I., and circular notice giving the new terms of employment sanctioned by the Executive Committee.

Stephanodores Hampei.—The Secretary read correspondence with the Secretary, U. P. A. S. I., ending with his letter dated June 13. It was decided that the matter be left to the Delegates to the U. P. A. S. I. Annual General Meeting.

Election of U. P. A. S. I. Representatives.—Mr. C. Lake and Mr. de Weck were elected.

Election of Control Committee Members.—Mangalore: Mr. Young was elected member-in-waiting.

Mysore: Active Member, Mr. H. H. English, Member-in-waiting, Mr. R. O. Oliver.

Instructions to U. P. A. S. I. Representatives.—The Delegates were instructed regarding several matters to be brought up at the Annual General Meeting of the U. P. A. S. I. in August. Mr. Dennis asked that the Delegates press for a definition of the powers of Control Committee Members. This was agreed to.

With the consent of the Meeting the following extra subjects were taken up:—

Election of Members on the Advisory Committee for the Coorg and Mysore Military Area.—Mr. H. H. English and Mr. H. Watson were elected to represent the Planting Community on this Committee.

Benevolent Fund.—The Chairman explained and gave figures to show how the Association stood as regards subscriptions and benefits. It was decided that the Secretary issue a special appeal to all members to subscribe both personally and for their estates.

Date of next Meeting.—The date of the next Meeting was fixed for September 23. With a vote of thanks to the Chair the Meeting ended.

M. A. DE WECK,
Secretary.

C. LAKE,
Chairman.

D. THE ANAIMALLAI PLANTERS' ASSOCIATION

Minutes of the Twenty-first Annual General Meeting held at the Anaimallai Club,
at 11 a.m., on Wednesday, June 2, 1926

Present

Messrs. J. E. Sampson (*Chairman*), J. Hatton Robinson, J. H. Ireland Jones, A. C. Cotton, E. Johnson, A. W. F. Mills, C. R. T. Congreve, H. De V. Gosselin, P. E. Achard, W. H. Martin, C. Elsner, H. Rogers, A. V. Danagher, B. D. Darkin, H. Gerry, E. N. House, R. Mc. M. Sweet, G. B. Reade, C. W. Mayow, E. Hardy, F. Imray, B. L. John and G. W. Wallace (*Honorary Secretary*).

Notice calling the meeting was read.

At the commencement of the meeting the Chairman spoke as follows :—All present standing.

GENTLEMEN,

Before proceeding with business for which this meeting has been called, it is fitting that we should give a moment's thought to one who, until recently, took a deep and lively interest in the activities of this Association and whose loss we deplore.

Mr. Cooper had been a member of our small community for nearly twelve years, and will be remembered by us all as one ever willing to work for the general good.

He had, for a considerable period, acted as your Honorary Secretary and had been re-elected to that position only a short time before he passed away.

In sport, also, he was always willing to help; giving up a very considerable amount of his time, as representative for this District, in the interest of the Upasi Sports Club.

It is not for me to refer to Mr. Cooper as a planter: one can but remember the opinions of him held by those in whose employ he was engaged, as Manager of Karaimallai Estate, for the past seven and a half years.

I feel sure that it will meet with your approval that our Honorary Secretary be asked to convey to Mrs. Cooper the heart-felt sympathy of all members of this Association.

Minutes of the following meetings printed copies of which had been circulated to all members were taken as read and confirmed :—

Extraordinary General Meeting of February 10.

General Committee Meeting of March 12, 1926, and April 5, 1926.

Special Committee Meeting of April 3, 1926.

Confirmation of Minutes.—Minutes of the Special Ropeway meeting held at the Anaimallai Club on May 26, were read and after alteration confirmed.

Election of Members.—Proposed by Mr. Martin, seconded by Mr. Richard :—Mr. G. M. Oakes—*Carried.*

Proposed by Mr. Cotton, seconded by Mr. Ireland-Jones that Mr. Sleby be elected an Honorary Member—*Carried.*

Chairman's Address

GENTLEMEN,

It is usual, at this meeting, for your Chairman to refer to the prices obtained for our various products during the past year, and to the prospects for the coming season : I propose, however, to omit these items, for the very obvious reason that every one present knows fully as much of such matters as I, and that here is a long agenda ahead of the meeting.

The one matter of particular interest, since our last Annual Meeting, has been, as is usual, Transport ; and I think it permissible to look back to the past season with considerable satisfaction, for the reason that certain very definite progress can be recorded. The formation of a Company for the erection and working of an Anaimallai Ropeway is in the hands of Messrs. James Finlay & Co., Ltd., and the draft Memorandum and Articles of Association of such a Company were carefully considered at a Special Meeting held just one week ago, this meeting being attended by Mr. H. L. Pinches, representative in Southern India for the above-mentioned Firm. The minutes of this meeting will issue at an early date. In the meantime it is sufficient to note that the Memorandum and Articles of Association were accepted, subject to certain minor alterations, and that the Directors of the proposed Company, six in number, were duly elected.

Our community is indebted to Messrs. James Finlay & Co., Ltd., to a very considerable extent, for the large amount of preliminary work undertaken, and now brought to the present satisfactory position. I venture to suggest that the result of taking this matter more or less out of the hands of the Association bears out the opinion I have heard on many occasions, with which I fully agree, i.e., that, after a certain stage, discussion of these very important matters in Association meeting cannot result in further progress, and that it is to the advantage of the District as a whole that the heads of the various interests should undertake the final arrangements. With the election of the Directors of the proposed Company an accomplished fact, we may look for further progress at no distant date.

The report of Mr. Fisher, of Messrs. Bird & Co., Ltd., of Calcutta, the Agents for Messrs. Ropeways, Ltd., requested by Messrs. James Finlay & Co., Ltd., to inspect the original Ropeway Survey, proved favourable except as regards a section of the line in which there appeared to be unnecessary angle-stations. This gentleman's recommendations with reference to the re-survey of this section of the line, for the purpose of eliminating the angle-stations, proved feasible.

I have recently received a letter from the Private Secretary to His Excellency, the Governor of Madras, to the effect that a letter will shortly issue from Government (Public Works Department), to the Secretary, U.P.A.S.I., in connection with the proposed Chalakudi/Valparai Railway,

and stating that Government have included the above line in the programme of construction, and recommend its construction during 1928-29. The news may be considered excellent; but, although the Association continues to reiterate its opinion that the final and most satisfactory solution of our transport problem is this Railway, the construction of such a Railway will presumably, take several years to complete; it has been admitted for a long time past that the District cannot afford to risk probable collapse of its present transport arrangements, due to one or more quite possible contingencies, and there can be no question as to the advisability of continuing with the Ropeway scheme.

Labour appears to have been sufficient for requirements, and, while the return of coolies after recent payment may have been somewhat slow, it seems probable that the current season's supply will eventually prove adequate. Conditions for labour on estates, as regards housing, water supply, medical attention, etc., are now on a very high standard, and I think it may be said that the health of our coolies has considerably improved.

While on the subject of labour, I would remind you that the present organization of the Labour Department, allowing for the Superintendence of the various divisions by Control Committees, is the result of efforts of certain members of this Association; and, that being so, it is of particular importance that the Association should take special interest in the matter. I would take this opportunity of impressing upon members the need of keeping with the Department funds sufficient for the requirements of their respective estates. As Control Committee Member, I have been in receipt of copies of the Labour Department (Coimbatore Division), accounts for the past few months, and it is seldom that the necessity, of drawing the attention of certain Managers to the debit balances of their estates with the Department, does not arise.

In connection with the Labour Department, your Committee have recently considered the recommendations of the Director of the Department with reference to the terms of employment of the various Superintendents, put forward at the request of the Executive Committee of the U. P. A. S. I. Your Committee's suggestions, confirmed this day, were duly placed before the Executive Committee, and you will, no doubt, be pleased to learn that these suggestions have been accepted, subject to certain minor alterations.

A matter which has received considerable attention from your Committee is the proposed installation of District Telephones. This subject has been on the agendas of our meetings since the latter part of 1919, and I admit that I had hoped that the past year would see the matter brought to a successful conclusion. As you are aware, the suggested scheme did not meet with approval from all interests, and, at a meeting of your Committee, held on March 12 last, it was agreed that the matter should be temporarily 'shelved'. I am given to understand that, since that meeting, certain interests have decided to instal their own system of telephones, without further reference to the Association or to the remaining interests. While admitting that each separate interest of our community is perfectly at liberty to please itself in such matters, I submit that such action, while the matter may still be considered as receiving the attention of the Association, is unfortunate, and, if I may say so, does not form a good precedent.

The further development of the Township is another matter which will merit careful consideration at this meeting. The past year has seen certain additions, but there remains a considerable amount to be done if the Township is to be developed as it should. I should, personally, like to see steps taken to have such parts of the land as are not built upon carefully planted in grass and shade trees, and, if necessary, fenced; and I consider it to the advantage of the Association that funds should be allotted for this purpose, inclusive of the cost of necessary upkeep. Those responsible for the upkeep of the P. W. D. Travellers' Bungalow and its surroundings are to be congratulated, though the contrast between the latter and the remainder of this land is unpleasant, to say the least.

It has to be admitted that one of the ways of attracting labour to our district is the arrangement of facilities for such labour to purchase its various requirements at competitive prices, and a large central village or market should be the first aim of this Association. Proof of this need may be obtained at Sholayar Estate every Sunday—in fact, on almost every day of the week—and Mr. Cotton has done the district considerable service in demonstrating this so plainly.

Last year Mr. Simmons made mention of the comparatively poor attendance at our meetings, and I would venture to reiterate his remarks.

In conclusion, gentlemen, I beg to acknowledge, once again, the honour you have done me in electing me your Chairman, to thank the Members of the General Committee for their assistance during my short term of office, and to request that you will accept my resignation.

Report of General Committee

Membership. Personal.—There are now sixty-five Members: an increase of three over the figure for the previous year. This increase may appear small, but is due to the fact that certain of our earlier members have left the district.

Estates.—Estates subscribing to the Association number thirty-four.

Subscriptions.—These had not been received in full, at the end of the financial year, but have since been satisfactorily settled with the exception of one estate.

Acreages.—Acreages for the year under review, for this district, are as follows:—

Tea	...	...	...	16,613
Coffee	...	...	...	2,478½
Cardamom and Cinchona	...	...	...	3,352
Total				22,443½

added to which the following Nelliampathy acreages continued to subscribe:—

Coffee	...	...	...	1,214
and Cardamoms	...	...	...	5½

making the Association's total 23,663 acres.

Figures for the current season show an increase of 254 acres, the total being 23,917. Of this acreage the two Nelliampathy Estates, comprising a total of 1,308 acres, have applied for permission to withdraw from the Association, owing to the desire to form a separate Nelliampathy Planters' Association. This matter will be further discussed at this meeting.

Crops.—Crops harvested during the year are as follows :—

Tea	...	...	...	7,024,183 lbs.
Coffee	...	...	...	428 Tons
Cardamoms and Cinchona	...	...	...	108,580 lbs.

showing an increase of 1,571,412 lbs. of tea, 225 tons of coffee, 98,814 lbs. of cardamoms and 81,974 lbs. of cinchona. These figures refer to the Anaimallai Estates only.

Planters' Benevolent Fund.—The number of life members remains as last year, viz., six. In addition, the following payments have been made :—

				Rs.
6 estates and 1 member	...	...	...	100 each.
2 members	...	...	...	50 „
1 member	...	...	...	30 „
6 estates and the Association	...	...	...	25 „
1 donation	...	...	...	20 „
71 members and 2 donations	...	...	...	10 „

A total of Rs. 1,755 has been forwarded to Madras : a figure very little short of the previous year's record : with the exception of the Mundakayam Planters' Association, our Association is the only one to exceed the sum of Rs. 1,000. It is interesting to note that, of the 309 planters subscribing, twenty-five per cent belongs to this District, and your Committee is again able to report the usual 100 per cent membership.

Meetings.—Inclusive of the last Annual Meeting, six General Meetings and eleven meetings of the General Committee have been held ; the average attendance at the former being only seventeen, a slight decrease on that of the previous year.

In addition, one meeting of the Township Committee, two meetings of the Select Committee with reference to the proposed District Board, and one meeting of a Special Labour Committee were held.

Chatrams.—The two acres of land applied for, surrounding the Chatram at mile 14/6, have been granted, rent free, and the necessary lease signed.

Your Committee considered a Medical Patrol Cart unnecessary this year, owing to the improved conditions at the Chatram, and are satisfied that the Compounder in charge of this Chatram has done useful work during the past few months : a considerable saving in expenditure will, therefore, result.

The Committee would draw your attention to the desirability of members occasionally inspecting the Chatram, while on their way up or down the Ghaut, for the purpose of checking the work of the Compounder. A book is kept at the Chatram for the purpose of entering any comments considered necessary, and such inspection will be of much assistance to your Honorary Secretary.

Township.—Considerable addition has been made to the Shandies on the Township, and your thanks are due to the Township Committee for their assistance. The question of further development will come up for discussion at this meeting.

Ropeway.—It is probable that an informal meeting of certain members of the Association, at Waterfall Estate, during April, and attended by Mr. J. B. Adkins, has done much to forward this scheme. We have been visited, during the year, by representatives of certain interested firms, at the request of Messrs. James Finlay & Co., Ltd., in whose hands this matter now rests; and a re-survey of the line has proved it possible to eliminate all angle-stations between Iyerpadi and Waterfall. It is believed that the Ropeway Company's prospectus will be issued at an early date. Further reference to this matter will be found in the minutes of the Special Meeting held on Wednesday, the 26th (which have been confirmed to-day).

District Board.—Little progress can be reported on this matter. Your Committee, at a meeting held in March last, considered that further reference should be made to the Collector of Coimbatore: this has been done; as yet, without reply.

Accounts.—These have been duly audited by Messrs. N. C. Rajagopal & Co., of Coimbatore, and printed copies of same circulated to all members.

It will be noted that the balance in hand has been reduced by Rs. 1,427-9-11, and now stands at Rs. 1,012-15-5. The budget for the current year will be considered to-day, and will merit your careful attention.

The Honorary Secretary will be glad to answer any questions in connection with the accounts.

Mr. Cotton asked the name of the estate which had failed to pay its subscription and was informed that it was Thoni Mudi Estate. Proposed by Mr. Hardy and seconded by Mr. John that the Committee's Report be accepted.

Carried.

Railway.—Mr. Congreve stated that he had circulated copies of the recent correspondence on the subject.

District Board.—The following resolution proposed by Mr. Congreve, seconded by Mr. Gosselin was put to this meeting and carried unanimously :—

'That the Committee of the Association be empowered to take all necessary steps to get the District Board started as soon as possible; after consultation with owners and agents of estates without further reference to the Association.'

Chatrams.—Mr. Martin asked if the Chatram at the junction of the Government and Puthuthottam Roads was used by coolies going to and from Estates. Messrs. Hardy and Hatton Robinson said that the Chatram was used by coolies going to the farther end of the district. The meeting was in favour of maintaining this Chatram as an Association Building.

Township and Budget.—It was considered advisable to discuss these two points together. Mr. Cotton asked for money to develop the Valparai Township. The meeting went in to Committee on the question of Township development. Mr. Congreve proposed and Mr. Martin seconded in open meeting, 'That a cess of six annas per acre on account of annual expenditure on Association's affairs be sanctioned, and that a special cess up to four annas per acre be sanctioned for development of the Valparai Township, and that the Township Committee should draw up an estimate for improvements, to be submitted to the General Committee for sanction.'

Carried unanimously.

Read letter, dated May 26 from D. E. Reuben, Contractor, P. W. D., who has been given the contract for the reconstruction of Paralai-Valparai Road. Decided to allow Mr. Reuben to erect temporary lines on the Valparai Township for his labourers.

Proposed by Mr. Ireland Jones, seconded by Mr. Congreve that last year's Township Committee to be asked to 'carry on.'

Carried.

Posts and Telegraphs.—Mr. Ireland-Jones mentioned that the tappal arrived at the Valparai Post Office at 3-4 o'clock on the day previous to delivery. Read the letter 1741 G1-I, dated May 5, 1926, from the Superintendent, Post Offices, Nilgiri Division.

Proposed by Mr. Johnson, seconded by Mr. Hardy, 'That the suggestions of the Superintendent of Post Offices, Nilgiri Division, for a motor postal service be adopted and that arrangements be made for taking on the mails to Mudis P. O. and Hardypet P. O. direct, and that Valparai Post Office be kept open till 6 p.m. to enable letters to be delivered the same evening.'

Carried unanimously.

Mr. Congreve said that he was constantly receiving complaints from London, with regard to the non-arrival of tea samples. Decided to write to the Post Master-General, Madras, on the subject.

Read and recorded letter No. 1606 F3-38, dated May 4, 1926, from the Superintendent of Post Offices, Nilgiri Division, *re* the late arrival of tappal bags at Valparai P. O.

Mr. Congreve complained that he had not received a tappal bag which he ordered eight months ago. Decided to write to the Superintendent of Post Offices, Nilgiri Division, on the subject.

Control Committee.—Mr. Sampson asked if the Association thought the Udumalpet Agency necessary. Mr. Ireland-Jones said that this Agency did a lot of work for Stanmore Group.

The Meeting recommended that the Udumalpet Agency be kept open.

Read letter No. C.C., dated May 14, 1926, from the Superintendent of U.P.A.S.I. Labour Department, Coimbatore. Decided that the next meeting of the Control Committee should be held at Bangalore, at the time

of the U.P.A.S.I. Annual Meeting. The meeting was in favour of Captain Macdougall being sent to Salem to do Propaganda work on his return to Coimbatore District. The Meeting instructed the Control Committee Member with regard to the suggested re-organization of the working of the Coimbatore District.

Mr. Congreve protested against the recruiting forms used by the Labour Department, Srivilliputture Division, referring to them as 'Childish and unnecessary' and asked that this matter should be brought up at the next Control Committee meeting and at the U.P.A.S.I. Annual Meeting at Bangalore.

The Control Committee Member for Srivilliputture Mr. John said that he had little to report as he had been unable to attend the last Committee Meeting, owing to the very inadequate notice given calling the meeting; the Notice being dated 18th calling a Meeting for the 29th. Read letter No. S.C.I., dated April 30, 1926, from High Range Committee Member for the Srivilliputture Division.

The Meeting was in favour of the Nellacotta Agency being kept on as a recruiting area open to all Districts.

Mr. Cotton drew attention to the fact that Mr. Bennett had again been forced to visit the District to collect funds, and suggested that the estates responsible should pay the travelling expenses incurred.

Considerable discussion followed.

Decided that while quite realizing this urgent need for Mr. Bennett's recent visit, he should be instructed in future to strictly adhere to the rules of the Labour Department in that he should cease to do any work for an estate whose funds were exhausted. The meeting further regretted the dilatory manner in which some estates had treated the Labour Department.

Anaimallai Leases.—Mr. Congreve spoke on this matter.

Decided that a deputation represent this matter to His Excellency Lord Goschen.

Proposed by Martin, seconded by Mr. Johnson that Messrs. Waddington, Congreve, Pinches, and Cotton be asked to represent our interests in this matter.

Carried.

Passports.—Read letter, dated May 7, 1926, from the Collector of Coimbatore District with regard to the difficulty of verifying Passport Declarations.

Proposed by Mr. Martin, seconded by Mr. Cotton, 'That the Collector be asked to arrange that the Chairman and Honorary Secretary of the Anaimallai Planters' Association be made Honorary Justices of the Peace.'

Carried.

Roll of Honour.—Read letter No. 1848, dated May 8, 1926, from the Secretary, U.P.A.S.I.

Proposed by Mr. House, seconded by Mr. Cotton, 'That a Roll of Honour of those planters who died as a result of the Great War be inscribed in St. Stephen's Church, Ootacamund, and that a copy of the Roll of

Honour, together with a list of those planters who served on any front, be placed in the office of the U.P.A.S.I., Madras.'

Correspondence.—Read and recorded letter from the Secretary of the Tea Brokers' Association of London stating that Anaimallai Estates could not be printed separately in sales reports.

Nelliampathy Planters' Association.—Read letter, dated April 16, 1926, from the Honorary Secretary, Nelliampathy Planters' Association, asking that Nelliampathy Estates at present belonging to the Anaimallai Planters' Association may be allowed to withdraw as the Nelliampathies are reforming their own Association.

Proposed from the Chair, 'That the Nelliampathy Estates at present belonging to the Anaimallai Planters' Association be allowed to withdraw therefrom and that no cess be levied for the small portion of the current year past.'

Carried.

Agenda of the Upasi Annual General Meeting.—Mr. Congreve asked that Anaimallai leases be put on the agenda.

Roads.—Proposed by Mr. Congreve, seconded by Mr. Hatton Robinson, 'That this meeting views with alarm the steady deterioration of the surface of the Anaimallai Ghaut Road during the past twelve months, and requests the Executive Engineer, P.W.D., to at once take the necessary steps to put it in thorough repair, and further requests that the necessary action may be taken to improve temporarily the worst sections of the Paralai, Puthote, Valparai Post Office Road, pending the reconstruction which we understand has been sanctioned, as otherwise it appears probable that it will become impassable during the monsoon for any form of wheeled traffic.'

Read letter No. 1836, dated May 20, 1926, from Mr. H. S. Northey, Executive Engineer, Coimbatore District, with reference to alleged non-payment of tolls.

The Honorary Secretary was instructed to ask for the number of the car in question, and also to draw the attention of the Executive Engineer to the fact that instances have recently occurred of toll-keepers closing the gates and putting chains across the Pollachi-Valparai Road at night, without showing any red warning light.

Further that as there is no water near the bandy stands on the Ghaut Road, bandys are out-spanning where water is procurable, often at the narrowest points on the road, causing much inconvenience to motorists.

Election of Office-Bearers

Mr. J. E. Sampson : *Chairman.*

„ G. W. Wallace : *Honorary Secretary.*

Mr. J. H. Ireland-Jones

„ J. Hatton Robinson

„ E. Johnson

„ A. C. Cotton

„ C. R. T. Congreve

} ... *General Committee.*

Mr. J. E. Sampson

„ A. C. Cotton

} *U.P.A.S.I. General Committee and Delegates to the
UPASI Annual General Meeting at Bangalore.*

Mr. C. K. Pittock ... *Coimbatore Division Control Committee Member.*
 Mr. J. E. Sampson ... *Member in waiting.*
 Mr. B. L. John ... *Srivilliputtur Division Control Committee Member.*
 Mr. A. W. F. Mills ... *Member in waiting.*

The Chairman and Honorary Secretary thanked the meeting for the honour they had done them in re-electing them and assured the meeting that they would do their best to look after the Association's interests.

With a vote of thanks to the Chair the meeting terminated.

G. W. WALLACE,
Honorary Secretary.

J. E. SAMPSON,
Chairman.

LETTERS TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' Views).

Secretaries of the Wynaad Planters' Association

THE EDITOR,

THE PLANTERS' CHRONICLE,

SIR, MADRAS.

In the first Editorial Note of last Week's issue you have published a statement of the members of that Association who have acted as Honorary Secretary since 1874, and I have no doubt it will be quoted as an authority for all time to come; but I am not sure that it is accurate and know that to a certain extent it is incomplete, for in it there is no mention of such well known Secretaries as J. H. Jowitt, the General Manager of the Tambracherry Coffee Estates Co., Ltd., whose headquarters were at Culloor, or of E. A. De Fonblanque, the tennis champion of the Perindotty Estate.

When Honorary Secretary in 1908, I put the records of the Association as far as they then existed into order and compiled a complete roll of all members from 1873 to 1908 showing who were Honorary Secretaries. From my copy of this there is a difference of one year in nearly all cases from the figures given by Mr. Finlayson. This is not of great importance, and might arise as regards the earlier years from the official year of the Association not agreeing with the Calendar Year, but this does not hold good as regards the years within my personal knowledge. For instance, I was first elected Honorary Secretary on January 5, 1907, re-elected on January 15, 1908, and resigned owing to leaving Wynaad for Coimbatore on January 13, 1909.

The Association was started on March 2, 1857; and, although Rule 3 provided that there should be a Chairman, I am unable to trace the name of either Chairman or Secretary until 1860 when Mr. J. Ouchterlony was Chairman. At the Annual Meeting in 1861 he was re-elected by a majority of one vote, recording ten against the nine cast for Mr. C. Y. Reed. In 1860 and 1861 Mr. A. C. Barnes of the 'Jane' Estate, named after his wife, and situated near the present Achur Estate, was Honorary Secretary. When the Wynaad Planters' Association waited in deputation on Sir William Denison in 1863 at Ootacamund, Mr. Barnes was still Honorary Secretary. In response to representations made by the Association, the Government of Madras in 1866 deputed Dr. Bidie of the Madras Medical Establishment to visit Coorg and Wynaad to investigate Leaf Disease; but I have not been able to find the name of the Honorary Secretary at the time.

During 1860 and 1861 Mr. J. Ouchterlony attended no meetings of the Association. He was, I believe, resident at Ootacamund and had been Chairman of the Madras Chamber of Commerce in 1843, 1844, 1845, 1851, 1853 and 1856.

From 1873 the records as to Honorary Secretaries is I believe complete, but I make it as follows. Will you ask Mr. Finlayson to check with his records:—

1873-1875	E. S. S. Thomson.	1900-1901	G. Romilly.
1876	W. V. Huddleston with W. Mackinlay (Acting.)	1902-1903	B. Malcolm.
1877-1878	H. B. Winterbotham.	1904-1906	C. E. Abbott.
1879-1883	G. L. Yonge.	1907-1908	H. Waddington.
1884-1885	P. Batty.	1909	{ C. E. Abbott. B. Malcolm.
1886-1887	G. Romilly.	1910-1914	C. E. Abbott.
1888-1889	J. W. Hockin.	1915	N. C. Whitton.
1890-1891	G. Romilly.	1916-1919	C. E. Abbott.
1892	J. H. Jowitt.	1920-1921	J. A. Gwynne.
1893-1895	G. Romilly.	1922	B. M. Behr.
1896-1897	J. W. Hocking. B. Malcolm (Acting.)	1922-1923	R. W. M. Hay.
1898-1899	E. A. DeFonblaque.	1923-1924	J. A. Gwynne.
		1924-1925	J. H. B. Sullivan.
		1925	I. W. Finlayson.

Mr. Finlayson gives Mr. Romilly as Secretary for the nine years 1889 to 1897, but I know that to be a mistake. In 1896-1897 Mr. Hockin was, I believe, Honorary Secretary; but, while Mr. Hockin was engaged on the Planters' Enquiry Commission, the outcome of which was the Madras Planters' Labour Act of 1903, Mr. Malcolm acted for him. Coming down to such a recent date as 1921 I find Mr. Finlayson shows Mr. Behr as acting, but Mr. Gwynne attended every meeting of the Association held that year as Honorary Secretary, as also the meeting of February and March 1922; and it is not till April 5, 1922 that Mr. Behr's name appears as acting Secretary.

Yours, etc.,
H. WADDINGTON.

(Perhaps Mr. Finlayson will kindly let us know whether he can confirm from his records the list which Mr. Waddington has drawn up. *Ed.*)

Subject:—Grassy Flavour in Coffee

THE EDITOR,

'THE PLANTERS' CHRONICLE',

SIR,

MADRAS.

This subject has been very much discussed lately in various journals interested in the Coffee industry, and an impression has been created that Kenya Coffee is particularly susceptible to this taint.

I have just received a letter, dated June 10, 1926, from Messrs. Lewis and Peat, Ltd., of 6 Mincing Lane, E.C.3, in reply to a letter from me dated May 14, 1926.

Inter alia, they state:—

'There is no cause for alarm, as this taint has not been traced in Kenya sorts. We may say that we have for some years, roasted and liquored a large number of marks of Kenya growth, and have not found any suspicion of "Grassy Flavour."

'Since receiving your letter, we have referred the matter to one of the leading Home Trade Roasters here who confirms that he has not tasted "Grassy" Kenya.'

The above extract should remove any suspicion of this taint in Kenya Coffee and my Council would be grateful if you could give this letter the fullest publicity possible.

POST BOX 381,
NAIROBI,
KENYA COLONY,
EAST AFRICA.

C. GAITSKELL,
Secretary,
The Coffee Planters' Union
of Kenya and East Africa.

MONTHLY REPORT
OF THE
GENERAL SCIENTIFIC OFFICER
FOR
JUNE 1926

During the first part of the month, I was on tour in the Nilgiris accompanied by the Tea Scientific Officer ; and returned to Head Quarters on the 8th. I stayed there till the 23rd, when I went to Coorg ; and returned to Head Quarters on the 29th.

Two years ago when in the Coorg District, I was taken to see an estate on which there were several big open patches on which coffee did not grow well. It was very noticeable then that under and close up to each shade tree there were one or two good coffee trees while away from the shade trees the plants were poor and stunted and although regularly supplied, would not grow or come away properly. This suggested three possible reasons for poor growth in the other parts.

1. That shade was insufficient, and mulch too little to produce its effects.
2. That the shade tree roots had a good physical effect in opening up the soil to a greater depth.
3. That bad planting had been done.

On opening up pits, it was found that about 1-1½ ft. below the surface there appeared to be a semi-pan layer ; which probably interfered with the moisture soaking into the soil during the wet weather and with the rise of soil moisture to the roots during the dry weather. A soil analysis showed a low phosphatic content.

The following recommendations were given :—

1. Trenching to a depth of 2½ feet.
2. Big pits 1½ × 1½ × 2 to be dug for the supplies, and supplies planted carefully.
3. Manuring of supplies to be done as follows :—

			Nitrogen	Phosphoric acid.	Potash.
50 lbs. Nitrate of Soda	...	...	7½	0	0
200 lbs. Fish Guano	...	...	14	16	0
150 lbs. Fine Bone Meal	...	...	4½	33	0
50 lbs. Muriate of Potash	...	...	0	0	25
<hr/>			<hr/>		
450 lbs. per acre giving	...	...	26	49	25
<hr/>			<hr/>		

The result this year is a perfect sheet of young coffee trees ; and, even with trenches 3 ft. deep every 3rd row both ways, the young trees show not the slightest effects from the very dry weather which was experienced up to the latter half of June this year.

During the dry weather which prevailed up to the end of June, green bug was causing anxiety in some estates. Generally speaking the white and black fungus take a heavy toll of the green bug during and after the rains. In February, March and April, the green bug is on the increase again and continues to multiply until sufficient rain comes and conditions are again favourable for the spread of the fungus. In one case which came under observation this year, green bug was very bad over an area 3-4 acres. Last year vigorous measures against ants were taken and the bushes sprayed with Fish Oil Resin Soap.

An examination this year showed that, while there were many ants in the soil, there were very few on the bushes and many of the bugs were parasitised. Owing to the very dry weather which prevailed in April, May and June, the possibilities are that the bug got a much greater hold again this year than it would have done under ordinary climatic conditions; as the white fungus did not get going quick enough after the efforts by artificial means last year to keep the numbers down. As regards ants nothing is known as to the part they play if any in the propagation and spread of the fungi. It does seem possible that ants travelling from infected to uninfected bug might quite easily carry infection with them. At the same time the researches of the Mysore Agricultural Department definitely proved that ants do help in the spread of the bug and therefore they should be kept down.

The suggestions made for bringing round the attacked coffee were.

1. Keep down ants.
2. Help the spread of the fungus by tying twigs with infected bug near bug which is not infected.
3. Heavily manure the bushes and heavily prune them, burning all the prunings and mulch.
4. Start spraying in February-March, and keep on spraying until the rains come on giving conditions for the growth of the fungus again.

Coffee Experiment Station, Sidapur.—Only 3.90 inches of rain were recorded during the month as compared with 16.37 inches during June last year. The coffee came through the dry weather satisfactorily and is looking well. There is a fair crop in all plots and berries are developing well. The crop on the sprayed plots is estimated at over 12 cwt. per acre.

As the Farm Manager has been reverted to Government Service as from July 7, the station was officially closed down on June 30, and the land handed over to the Consolidated Coffee Estates, Limited. An arrangement was come to with the Consolidated Coffee Estates, Limited, whereby the station can be resuscitated if necessary. All plots are being carried on as they are; and, while no manures are being applied this year, spraying and cultivation experiments will be carried on and the crop on the various plots picked separately for record purposes.

Thanks are due to the General Manager, of the Consolidated Coffee Estates, Limited, for the help he has given in the matter.

COIMBATORE,

July 22, 1926.

D. G. MUNRO, B.Sc.,

General Scientific Officer, U.P.A.S.I.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending July 24, 1926
Bank Selling Demand Draft on London

19th	20th	21st	22nd	23rd	24th
17 29/32d.	17 7/8d.	Holiday.	17 7/8d.	17 29/32d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending July 3, 1926	January 1 to July 3, 1926	January 1 to July 3, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING JULY 3, 1926)			N. India.	1 6·27	1 8·77	1 5·43
			S. India	**1 5·74	††1 5·74	††1 6·52
			Ceylon...	1 6·27	1 9·64	1 8·01
			Java ...	1 2·94	1 5·21	1 0·89
			Sumatra.	1 5·81	1 7·13	1 4·36
			Nyassa-land.	1 4·09	1 6·25	1 1·49
(a) Anamalais—			Total ...	*1 5·85	†1 8·70	†1 5·84
Sholayar ...	123	1 6				
Thayamudi ...	233	1 5½				
Kallyar ...	172	1 5½				
Mukkottumudi ...	340	1 5½				
(b) Central Travancore.						
Stagbrook ...	142	1 6				
Twyford and Ashley.	132	1 5½				
Kuduakarnam ...	160	1 5				
Haileyburia ...	120	1 5				
(c) Kanan Devans—						
Perriavurrai ...	129	1 7½				
Kalaar ...	197	1 6½				
Letchmi ...	147	1 6½				
Guderaie ...	123	1 6				
(d) Mundakayam—						
Yendayar ...	189	1 5				
(e) Niligiris—						
Nonsuch ...	145	1 7½				
Terramia ...	53	1 7				
Bhawani ...	109	1 6½				
Craigmore ...	86	1 5½				

(B) COFFEE

London Prices (seven days ending July 6, 1926)

No Indian Coffee appears in the list of the Public Auction Sales, at which Kenyans and Costa Ricas sold freely at a high price.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, July 27, 1926, was 20½d.

** Based on 3,528 packages.

†† " " 87,478 " "

†† " " 92,758 " "

* Based on 80,663 packages.

† " " 1,670,050 " "

† " " 1,447,243 " "

(b) *Précis of Reports on the London Market received on Monday, July 26, and covering the seven days ending Tuesday, July 6 :—*

(1) *Tea.*—During the seven days under review there was a decidedly firmer market for all except the commonest kinds which went a little in Buyers' favour; and so we gather that the small drop of $\frac{1}{4}d.$ in the South Indian average, which occurred during the Calendar week ending July 3, was due to a very slight falling off in the quality of the South Indian parcels on auction taken as a whole rather than to any decline in the prices which the better class parcels were fetching as compared with those of the previous week. We understand that the last of the 1925 crop was up for sale on Monday, July 5.

(2) *Rubber.*—Messrs. T. H. Allan & Co., in their Circular dated July 7, state that stocks again decreased and now stand at 23,645 tons; but this figure may be inaccurate as in their previous Circular dated 30th ulto. they gave the stocks as 23,800 tons. If both their figures are correct; stocks, of course, must have decreased and not increased. The figure cannot be considered as unduly large when it is remembered that the Stevenson Commission considered that 40,000 tons was the desirable quantity to have in stock if prices were not to experience fluctuations other than those caused by the economic law of Supply and Demand. Moreover, it is said that much of the present stock is already sold and merely awaiting delivery to the buyers; and, if this be so, the stocks at present on the market are possibly quite small. Even, however, if the stocks are comprised almost exclusively of rubber which is still unbought, it is by no means improbable that they will be very seriously depleted as soon as a revival of trade sets in. This is evidenced by the fact that despite very disappointing consumption during the first half of the present year stocks have only increased by about 16,000 tons, whereas they decreased by no less than some 24,000 tons during the corresponding period of 1925 when consumption was exceptionally high.

(3) *Coffee.*—No Indian Coffee appears to have been auctioned publicly during the seven days under review; but we are informed that full prices were realized at private sales. On July 3 stocks in London of African, Indian, and other kinds respectively were given in bags as 29,808, 15,302 and 109,409 as compared with 36,483, 40,108 and 132,778 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, July 18, 1926, to Saturday, July 24, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total	Stations	W.	P.	Total
1. Thuckalai...	N.R.	37.46	N.R.	19. Naduvattam	2.73	43.17	45.90
2. Kalthuritty.	N.R.	52.05	N.R.	20. Coonoor ...	0.40	7.04	7.44
3. Tenmalai ...	7.50	55.36	62.86	21. Kotagiri ...	0.26	14.38	14.64
4. Mundakayam.	8.44	49.70	58.14	22. Ootacamund	0.89	21.34	22.23
5. Peermade...	10.85	68.42	79.27	23. Yercaud ...	0.11	20.70	20.81
6. Twyford ...	12.43	76.51	88.94	24. Devala ...	N.R.	67.64	N.R.
7. V'periyar ...	3.18	33.26	36.44	25. Gudalur ...	3.15	37.76	40.91
8. Kalaar ...	11.85	62.64	74.49	26. CALICUT ...	5.24	57.67	62.91
9. Chittuvurrai	0.98	16.51	17.49	27. Kuttiyadi ...	3.94	67.61	71.55
10. BODI'KANUR	...	4.74	4.74	28. Vayittiri ...	6.13	91.33	97.46
11. COCHIN ...	2.66	60.47	63.13	29. Manantoddi.	5.25	37.73	42.98
12. Mooply Valley.	5.98	62.33	68.31	30. Billigiris ...	N.R.	N.R.	N.R.
13. Pachaimalai	6.17	44.48	50.65	31. Sidapur ...	2.60	35.47	38.07
14. Mudis ...	11.55	83.09	94.64	32. Pollibetta...	3.40	45.93	49.33
15. Nell'pathy...	8.17	26.55	34.72	33. Somwarpett	N.R.	20.19	N.R.
16. POLLACHIE	0.59	7.97	8.56	34. Ballupete ...	2.45	20.47	22.92
17. Manjeri ...	5.23	57.60	62.83	35. MANGALORE.	4.18	49.91	54.09
18. Nilambur ...	4.52	53.57	58.09	36. MADRAS ...	0.22	2.55	2.77

(N.B.—Will the Observers at Stations 1, 2, 30, and 33 from whom no returns have been received this week kindly bring their figures up to date in their next cards.—Ed.)

W = During the week.

P = Previously.
(from April 4, 1926)

N.R. = No return

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, No. 32] SAT., AUGUST 7, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	521	Helopeltis ...	525
Helopeltis and Ourselves ...	523	Do. and Ca (CN) ₂ ...	527
Advanced Malaria ...	524	Letter to the Editor—	
Shevaroy P. A. Meeting ...	524	Wireless Tea ...	532
		Commercial and Meteorological.	533

EDITORIAL NOTES

The Planting Community will have noticed with lively satisfaction from the Report of the Royal Commission on Indian Currency and Finance which was published on the Wednesday of this week, that the Government of India with the approval of the Secretary of State in Council intends immediately to take such steps as may be necessary to confine fluctuations of Exchange between the 'Gold Points' of a One and Sixpenny Gold Rupee, and further to lay before the forthcoming Simla sessions of the Central Legislature proposals to embody the new parity of the rupee in statutory form. As the most effective way of linking the 'token' rupee to Gold (as opposed to Sterling) at a value of 3-40ths of the gold in one sovereign; the Commission has recommended that a Central Reserve Bank on the lines *mutatis mutandis* of the Bank of England should be established, and that Currency Notes should no longer be convertible into silver rupees.

The provision made, in connection with the last mentioned recommendation, for the reintroduction of the One Rupee Note will be right royally welcomed by Estate Superintendents, particularly those on the more inaccessible estates, who are now under the onerous necessity of making arrangements for a supply of silver rupees whenever their labour force is being paid.

So long as the present notes, of denomination Rs. 5 and upwards, remain in circulation the Government will of course continue to honour its promise to convert them on application into silver rupees (a procedure which is really equivalent to issuing Silver notes in exchange for Paper ones); but when, in course of time Central Reserve Bank Notes of the new status have come into general use, and are being unquestionably accepted as Legal Tender by the public at large, there will no longer be ordinarily any necessity to provide for their encashment in rupees; and consequently the way will be paved for the abolition of the present separate Paper Currency Reserve, and the release of the large stocks of earmarked silver amounting

to some Rs. 85 crores which it now is uneconomically compelled to hoard as a backing for its Notes.

As of possible interest to any readers who make a special study of Exchange, but are divorced from Books of Reference, we may conclude by mentioning that 934 Sovereigns and 1 Half-Sovereign are minted from 240 Troy Ounces of Standard Gold (i.e. 22 Carat Gold or gold containing 22/24ths of Pure Gold plus 2/24ths of alloy); so that £3-17-10½ and £4-4-11½ are the respective values of the Troy Ounces of 'Pure' and 'Standard' Gold.

During the course of this week, extracts from last year's Directory consisting of the portions of the text with which they are respectively concerned have been sent to the Honorary Secretaries of all District Associations, and also to the Managers of the larger Companies which each control several Estates. The Secretary of the U.P.A.S.I. feels confident from past experience that he can rely on these recipients promptly returning the extracts in question duly brought up-to-date; and has therefore asked us to tender them his thanks in anticipation for any loss of time and sacrifice of personal convenience involved in their compliance with his request. He has also requested us to point out in these columns that his endeavours to secure absolute accuracy in the new edition would be greatly furthered if all possessors of the old edition would refer to any entries with which they are concerned in Sections I to V inclusive; and indicate to him at their very earliest convenience any amendments or additions which should now be made. We understand that a few Estate Offices still do not possess a copy of this comprehensive book of reference; which Mr. Waddington now issues annually in compliance with a resolution passed at the General Meeting of the Association in 1923; but this is a state of affairs which we anticipate will now be remedied, and intending purchasers would both help the U.P.A.S.I. Office and avoid possible disappointment to themselves by placing their orders for a copy of the book at once. The price is only Rs. 7-8-0 Post Free; and there is no doubt that any Planter who invests in it will be repaid many times over for the comparatively small expenditure, for he will find it of continual use to him day by day throughout the ensuing twelve months.

The half yearly Meeting of the Indian Tea Cess Committee which was held on July 23, at the Royal Exchange, Calcutta, with Mr. T. C. Crawford in the Chair, increased the respective allotments for Sir Charles Higham's propaganda in the United States during the year ending March 31, 1927 from £35,000 to £40,000; and for the exhibit at the forthcoming Sesquicentennial Exhibition at Philadelphia from £7,500 to £10,500.

This Exhibition is in Commemoration of the 150th anniversary of the birth of the U. S. A.; for in Philadelphia on July 4, 1776, the delegates of the various American Colonies adopted unanimously the following Declaration of Independence which Thomas Jefferson had drawn up:—'We, the representatives of the United States of America, in Congress assembled, appealing to the Supreme Judge of the world for the rectitude of our intention, solemnly publish and declare that these United Colonies are, and of right ought to be, Free and Independent States.' The Declaration was acknowledged by Great Britain after the surrender of Lord Cornwallis to General Washington at Yorktown on October 19, 1781, and led to the framing of the Constitution which, between 1787 and 1790, was ratified by the original 13 States.

*The Planting
Directory of
Southern India—
1926*

*American Tea
Market*

HELOPELTIS AND OURSELVES

Helopeltis is soon going to have a very thin time of it locally ; if we are at all correct in our estimate of the encouragement which the two Articles published on Page 525 *et seq.* of this issue will give those who are waging war against this Pest.

We would draw attention to the former of the two Articles as having a special significance apart altogether from the interesting and helpful way it deals with its subject ; inasmuch as it embodies the experiences of a practical Planter in dealing with a problem of every-day planting life. Those who have borne the heat and burden of a strenuous day's work are naturally very often disinclined to devote a portion of their scanty and much-needed leisure to recounting for the benefit of their fellow-workers the personal experiences which they themselves have gained. So we feel sure that our Readers will be grateful to 'Pootharl' ; and we trust many, remembering that imitation is the sincerest form of flattery, will show their gratitude by following his lead. Previous Editors have stressed again and again that the value of this Paper would be immeasurably enhanced if Planters would, from time to time, relate in its pages their own experiences in attacking the many difficulties and problems of practical Planting life.

In this connection we might almost amplify a recent Article which we wrote under the heading 'Agricultural Science and Agricultural Art' by suggesting that in matters scientific *The Planters' Chronicle* might partially fulfil the functions of one of the liaison officers whose sphere of usefulness we there were trying to depict. We mean, of course, that the Planter might, to some extent, make the Paper a vehicle for keeping his Scientific Officers informed of the progress he is making in the practical application of their 'specifics' to the conditions of workaday life.

'Pootharl' has shown how this can be done ; and, with due recognition of the limitations of laymen who are neither Scientists nor Planters, and at the risk of having the opening words of his article applied to ourselves, we would venture to suggest that his contribution supplements the scientific article following it in a very interesting way. To quote but one example ; he surely makes a very pertinent point when he urges the often-lost-sight-of fact that Helopeltis is by no means dietically dependent upon tea ; for the unavoidable conclusion is that, while scientific methods are successfully eliminating a regiment entrenched in the tea bushes, a whole battalion may conceivably be being raised in the weeds of a neighbouring jungle or an adjacent field. And that battalion would have wings, and be capable presumably of embarking on an aerial raid !

Scientific questions, however, are not the only ones that a Planter, willing to relate his experiences in this Paper, might help to solve. *Solvitur ambulando* is a motto which also applies equally forcibly to all those many matters which form 'The Questions of the Day' from a planting point of view.

A perusal, for instance, of the very comprehensive Minutes of the Anamalai Planters' Association Annual Meeting which we published last week, will at once indicate such subjects, to name but few, as Communications ; Model Villages or Townships ; and Cooly Co-operative, or at any rate properly supervised, Central Markets : and a moment's reflection suggests a vast number of others which could be advantageously dealt with in embryo by individuals, and thus nurtured until they attain the measure of maturity requisite to bring them under the tutelage of a D. P. A.

ADVANCED MALARIA

BY

Dr. W. H. THYNE; MEDICAL OFFICER,
MANANTODDY GROUP

The following few notes on advanced Malarial fever are written in the hopes that they may be of interest and value.

Amongst the numerous complications and results of Malarial fever it is no uncommon sight to see a patient suffering from Dropsy, commoner amongst children than adults. The class usually affected are those who refuse treatment, in particular the Tamil chuckler and the Kanarese.

The Dropsy starts at the feet and ankles, and gradually spreads up to the face and head. In many cases the face is so puffed up that the patient's eyes cannot be opened. Ninety-nine per cent of these cases met with in the Wynaad is the result of Malarial fever, and not the result of any kidney trouble.

The cause of the Dropsy is due to destruction of Red Blood Corpuscles by the Malarial parasite to such an extent that the blood becomes more or less serious in character, eventuating in an increased permeability of the capillary walls which results in dropsy.

On examining the blood no Malarial parasites could be found.

The treatment for these cases, after excluding renal diseases, is very simple, most successful, and is as follows:—

Six intramuscular injections of quinine bihydrochlor on six consecutive days.

Mixture Cinchona Febrifuge three times a day two hours after food.

Mixture Iron and Arsenic tonic three times a day.

A vast improvement is seen in the patient before the termination of the treatment, and by the tenth day the patient appears to be perfectly all right.

Treatment ordinarily must be continued for at least a month, or a recrudescence is likely to occur.

SHEVAROY PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Extraordinary General Meeting, held at the Victoria Rooms,
Yercaud, on Thursday, 22nd July, at 2 p.m.

Members present

Mrs. V. A. Lechler, Capt. E. H. A. Travers Drapes (*Chairman*), Messrs. C. Rahm, W. I. A. Lechler, B. A. R. Kandaswamy Chettiar and W. A. Rahm (*Honorary Secretary*.)

1. *Notice calling the Meeting*.—Notice calling the Meeting was read.
2. *Confirmation of Proceedings*.—Read and confirmed Proceedings of E.G.M. and A.G.M. held on May 27.

3. *Election of Delegates to the Upasi Annual General Meeting*.—Proposed by Mr. W. I. A. Lechler, seconded by Mr. B. A. R. Kandaswamy Chettiar, 'That the Chairman and Honorary Secretary be elected Delegates to the 33rd Annual General Meeting of the Upasi to be held on August 23 at Bangalore.'

Carried nem. con.

4. *Upasi Annual General Meeting*.—The Agenda of the Upasi Annual General Meeting were read and discussed. Resolved 'That the instructions to Delegates be postponed until the next Meeting, the present Meeting not being a representative one.'

Carried nem. con.

5. *Correspondence*.—Read letter from the Secretary, Upasi, dated May 3, re Scientific Department.

With a vote of thanks to the Chair the Meeting terminated.

W. A. RAHM,
Honorary Secretary.

E. H. A. TRAVERS DRAPES,
Chairman.

HELOPELTIS

BY

'POOTHARL'

'Fools rush in where wise men fear to tread' is a saying which may possibly be applied to me when I dash into the twin desperate ventures of print and discussion of so vexed a subject as the above.

If it was however not for the action of fools there would be no one to give a line to the wise men; so, Mr. Editor, seeing that you say you are anxious to publish the views of your readers on various topics, I shut my eyes and dash boldly into the unknown.

But before getting on with the subject I would like to say that I do not wish to appear that I imagine I am preaching a gospel. All I want to do is to put the little knowledge I have scraped together from reading, discussion and observation, at the services of those who like myself are interested in trying to eliminate this horrible little source of damage and bad language. And as now we have got an enthusiast of our own to stimulate again our spirits that are beginning to flag in the battle, by providing us with the technical knowledge we lack, the moment would seem a favourable one.

When first I came to this Estate I was told that helopeltis was absolutely ruining the place; and that, if we couldn't beat it, we would probably have to shut up.

Well, we haven't beaten it; but the estate hasn't been shut up, and is now flourishing. In fact the yield has risen from 543 lbs. per acre in 1919 to 760 lbs. in 1923 (which was of course a very good year); and normally to about 700-730 lbs. per annum, on the same tea acreage; and, touching wood, the helopeltis attacks are not half so bad.

Let me tell you what I assign this to, and then give my own ideas on certain current theories.

We first of all tackled pruning; and instead of pruning all the year round as was customary, we began our programme just when the Helopeltis attack was beginning, bringing our tea into plucking when the attack was over. This makes things very strenuous in the rush; but we get over that all right, and get a jolly fine crop.

The fact that the nearer the source of food we kept our plucking area on the bush the stronger our flush would be we also took into consideration; and reversing the former policy of being very gentle with our bushes, we pruned back very hard. This was also of course to get rid of the knots which the gentle treatment had produced and restore bushes to more efficient condition.

Finding that there are a lots of weeds which the enemy sheltered in and got reinforcements from, we did away with these (an argument against the weed growing fraternity and one much too long to go into here).

We also found on looking into things that the jungle on the boundaries, in swamps and ravines, and along stream sides, also grew plants which the helopeltis was accustomed to live on before we generously provided the much more tasty tea bush for it. So we cleaned all these up as far as possible. We can't get rid of it all because it doesn't all belong to us, and there is some which would necessitate work which we live in hopes of getting done in time.

Manuring and cultivation we have also tackled; and, although this is only in its early stages, I am certain it is proving an effective part of the cure.

Anyway, as I have shown at the beginning, the yield has risen fairly satisfactorily; and I am sufficiently optimistic to believe that, when the

wood has come back on to the hard pruned bushes and our cultivation programme has had time to take effect, the yield will advance considerably more. It is evident that weak bushes suffer from this pest, as they do from all diseases which must also be tackled.

Now although I do not wish to crab anything—for who can ; even with far greater knowledge than I possess or ever shall possess ?—I would like to give my ideas of the various other methods of fighting helopeltis I have heard, seen, and tried.

I used at first to put on my pluckers who hadn't any other work to do owing to the depredations of our friend the enemy, to catch them ; and they daily brought pounds to be burnt in the Factory furnace, until I saw it made not the slightest difference to the attack.

Once I had a go at a big area with sprayers and catchers combined and cleared it absolutely, but six weeks afterwards my labours had all been as nought. I have heard of people burning prunings, and making smoke barrages, with no effect and have had other, many other, schemes discussed, tried, and turned down.

Mind you, as I say, I don't wish to say anything against all these things because I don't know enough ; but I do know what I've tried and found useless.

One thing I feel sure is quite wrong, at least here, and that is the theory that helopeltis has developed into a 'pukka' tea mosquito, different to his jungle forefathers, and lives entirely in the tea ; because nothing on earth will make me believe that it can exist on dry tea prunings and bare wood. If watched it can be seen that the attack invariably starts near a piece of jungle or an adjacent field and that certainly it does live in the weeds.

In discussing these matters people often seem to ignore the fact that helopeltis has wings and can fly ; and being able to fly, gets carried by the wind quite long distances.

After hearing of alternate row pruning in Java ; I had hoped to find that bushes left to grow up would not be bitten, but was badly disappointed. Of course these didn't get it so badly as those that were plucked because there wasn't so much young leaf and there were no convenient succulent stalks left by the pluckers to lay their eggs in.

Spraying with a suitable insecticide would be very helpful if one could spray when the attack was starting ; but unfortunately it is raining at that time and so is not practical. Besides to spray continually several hundred acres of tea all through the helopeltis season would need a great deal more labour than we can get in these hard times.

To be done properly spraying must be done at least once a week, and kept up right through or it is no good.

I may be entirely wrong, Mr. Editor, but I think it is generally agreed that there is no royal road to the eradication of helopeltis, nor magic wand with which to wave it away. But like the lucky Derby Sweep ticket long suffering patience may one day have its reward.

Being an optimist I feel that one day we will win both. But it is a slow and arduous job, particularly in the instance of the cause of this article where our Scientific experts can greatly help, though we can all do our little bit by airing our views.

And if the men of science would only tell us what the little brute like so much in the source of our bread and butter we would get along much more rapidly.

PRELIMINARY REPORT
ON THE
APPLICATION OF CALCIUM CYANIDE DUST
TO THE
CONTROL OF HELOPELTIS IN TEA

BY

W. H. BRITTAIN, Ph. D., M. Sc. (in Agriculture),
ENTOMOLOGIST; and W. S. SHAW, Ph. D., M. Sc., A.I.C.,
TEA SCIENTIFIC OFFICER, U.P.A.S.I.

INTRODUCTION

The experiments described in this report are of a strictly preliminary character, and were conducted on a very small scale. The results are presented herewith not only on account of the great significance of the problem involved to the tea planters of South India and the necessity for the control of a pest responsible for so much damage, but also because of the promising nature of the results themselves, and because it represents the first attempt to control *Helopeltis* by this method.

MANUFACTURE, CHEMISTRY, AND REACTIONS OF CALCIUM CYANIDE

In order to comprehend fully the nature of the results obtained it is essential to have some conception of the material employed in the experiments, especially with regard to the characteristic properties which make its use possible in tea culture.

Briefly, it may be stated that Calcium Cyanide is prepared by a series of processes commencing with Limestone, Coke and Nitrogen derived from the atmosphere. From the two former materials Calcium Carbide is prepared; which, after being raised to a white heat, is caused to absorb the Nitrogen, liberated from liquid air by boiling. The resulting substance formed is the well-known fertiliser Calcium Cyanamide. This Calcium Cyanamide is then fused with a Sodium Chloride in an electric furnace, by which process the Cyanamide takes up one more atom of Carbon and is thus converted into Calcium Cyanide, a substance with profoundly different chemical characteristics from Cyanamide.

When Calcium Cyanide is acted upon by the water vapour present in the atmosphere, gaseous Hydrocyanic acid (Prussic acid) is produced, the reaction involved in the production of this acid being explained by the following equation:—



The rapidity with which this hydrolysis takes place is dependent mainly on three factors:

1. The thinness of the layer of Cyanide.
2. The size of the particle.
3. The relative humidity.

The result is that a number of grades of the cyanide material are in existence, the commonest form appearing in the market being that termed commercially as 'Cyanogas "A" Dust.' This 'A' Dust is a very fine, slate-coloured powder, of which 80 per cent will pass through a 200 mesh sieve. Using this grade, it has been determined that, when the material is spread out in a thin layer such as is formed when it is projected from an appropriate dusting machine, 90 to 98 per cent of the poisonous hydrocyanic acid gas is evolved within the first two hours, provided that the relative humidity is 35 per cent or more. If the relative humidity is below 30 per cent the evolution of the gas is considerably retarded. I

may be added that localities with such a low humidity as 30 per cent are more the exception than the rule in tea growing districts. The maximum concentration of the gas is attained after a period of about forty minutes, but there is very little increase after the first five minutes exposure to the suitable moisture requirement. Further, it has been determined that the reaction takes place practically independently of the temperature. Coarser grades than the 'A' Dust are produced for certain special purposes, but where these are used, or where the thickness of any one of these grades is increased, the evolution of the gas is correspondingly slower.

ADVANTAGES CLAIMED FOR CALCIUM CYANIDE

It is claimed for Calcium Cyanide, that it has the highest range of adaptability of any other known insecticide. Arsenical or other food poisons may be effective for insects that eat solid food, while oil emulsions and other contact poisons may destroy insects of the suckling variety that sting the plant and feed upon the liquid sap of the latter. It has been shown by Andrews that the *Helopeltis* insect has the peculiar power of dealing with contact poisons, by systematically washing itself free from the insecticidal liquid. It was therefore concluded that spraying was of little avail against the pest; however, owing to the patent powers of Calcium cyanide as an insecticide, without the necessity of contact with the insect, it was felt that it might prove of some avail in assisting, if not completely eradicating, the pest. In support of this, it may be added that Calcium Cyanide is mainly utilized as a controlling agent for insects of the sucking type, to which type *Helopeltis* belongs and some examples of its application to such insects which might be cited are, the elimination of plant lice, plant bugs, thrips, psyllas, fleas, etc. It may also be employed satisfactorily against certain species of leaf beetles and other insects of the biting type. These instances given by no means exhaust the application of Calcium Cyanide as a control against pests, but a discussion of all the uses of the material is outside the scope of the present article.

A further advantage of the material is the ease with which it may be transported from place to place; but possibly the greatest advantage, and one which will appeal to the South Indian planter, is due to the fact that no water is required for the application of the dust. It is a well-known fact that one of the greatest difficulties experienced by planters in their attempt to control insect or blight attacks by means of sprays is due to the inadequacy of their water supply. In the case of Calcium Cyanide no preliminary preparation of the material is required, no water has to be carried to the place of operations, the material can be applied with comparative ease and rapidity, the effectiveness of an operator equipped with a duster is approximately five times as great as one using a sprayer and finally the equipment employed is simpler, lighter, and less expensive.

A possible argument against its use in Tea may be based on the fact that Calcium Cyanide is a deadly poison. Though it must be said, before proceeding, that further work must be done with regard to any residual poisonous effects of the material, still there is sufficient theoretical and practical evidence to indicate that there is no poisonous deposit left on the leaves after a short period of time. As has already been explained in a previous paragraph, all the poison has been evolved in the form of a gas leaving behind harmless Calcium Hydroxide (Hydrated Lime). To illustrate the fact of the complete loss of poisonous residue, the leaves of a tea bush treated the previous day have been repeatedly eaten without any harmful results. While it is not pleasant to have the material blowing directly into

one's face, this unpleasantness can be largely avoided by proper manipulation; and in the many experiments which have been conducted with this material in other spheres besides tea, no coolie has ever suffered injury. Thus no fatal accident has ever been reported from any country where the material is used on a very large scale.

With reference to the poisonous effects of Calcium Cyanide on mammals, it has been stated in the *Journal of Hygiene* (Vol XXI, No. 3, May 1923) that 'it requires a concentration of 8 parts of Hydrocyanic gas in 100,000 parts of air to kill a dog in half an hour; cats die from twelve parts and goats and monkeys from twenty-five, and it may be assumed that a man will require as much as a goat or a monkey'. A man becomes unconscious only when exposed to a high concentration, and if the concentration that caused unconsciousness is not increased, a comparatively long latent period intervenes before death. A person who becomes unconscious owing to exposure to moderate concentrations of Hydrocyanic gas recovers rapidly when placed in the open air.

If, therefore, 100 pounds of the straight product were used per acre this would yield twenty-six pounds of Hydrocyanic acid gas, and assuming that the whole acre were roofed over to a height of six feet and further that all the gas were given off at once, this would give a concentration within the enclosed area of 132 parts of hydrocyanic acid gas per 100,000 parts of air, or 66 parts, if the 50 per cent dust is used. However, not more than a third of the concentration is attained at any one time, even in tents, so that even in enclosed spaces the most that could be attained would be 22. In the open air it is clear that even this concentration of 22 could not possibly be obtained under the conditions specified of 100 pounds of material to the acre, and hence it is almost a practical impossibility to obtain anything approaching a fatal dose while operating in the open air. Practical proof of this is afforded by the fact that one of us has been using the material constantly for a year and has often been enveloped in clouds of the dust, without any disagreeable consequences being experienced. Short of having the material administered in food, there appears to be no possibility of harmful results accruing from the use of the material in the open air, but it is advisable to understand the simple precautions given on the containers thoroughly, and to follow these as closely as possible throughout the operations. It is further stated that constant dusting by one coolie may result in a slight headache, and it is therefore recommended that a coolie should do one half a day's dusting and then be relieved by another coolie.

EXPERIMENTS WITH HELOPELTIS

The estate on which the following experiments were conducted is situated about four miles from Vandiperiyar, in Travancore. The bushes were in their second year from pruning and though in quite good condition, plucking had had to be postponed for a number of weeks owing to the ravages of *Helopeltis*.

The first test performed was made on a clump of *Helopeltis* insects which had been caught by children previously. This clump consisted mainly of adult insects, but also contained a number of 'nymphs' or larvae. On to this clump a small whiff of the material was blown, and within a second most of the insects were killed. Even those insects which were in the middle of the clump, and had thus escaped contact with the dust, had also been killed. From this test it was clear that the material was extremely toxic to the insects and the way was clear for field experiments.

The tests in the field were made at between three and four in the afternoon and between eight and nine in the morning. In both instances there was a fresh to heavy breeze blowing throughout the progress of the work; and further, in both cases rain fell both previous to and during the operations. Usually conditions of rain and heavy wind are not conducive to the best results in any dusting operation, but as will be seen later these factors did not diminish the degree of effectiveness to any appreciable extent.

The exact infestation per bush could not be accurately determined, even though extreme care was taken in the examination of the bushes for insects. It would appear, however, that the infestation was at least equivalent to five insects per bush. These five insects were usually found in the proportion of three adults to two larvæ. In order to increase the number of insects per bush for purposes of experiment, four more insects, which had been previously collected by children, were added to each bush.

In the first day's tests, both the 'A' dust and the 'Dusting mixture' were used, the latter dust consisting of 'A' dust, diluted with an equal quantity of superfine Sulphur, and which is especially efficacious against Red Spider. Owing to the prevailing heavy wind it was found necessary to make use of a 'Cloth trailer', under which the dust was projected. As no canvas was available a piece of ordinary factory cloth (cotton) 6 feet wide and 20 feet long was used. This was attached in front to a light bamboo pole. A man stood in front and manipulated the sheet so as to permit of the least loss of the dust, while behind him stood the man with the dusting machine, who pumped the dust under the sheet in such a way as to secure the best possible distribution of the dust, and it was found advisable to have a further coolie assisting in the manipulation of the sheet behind. Rather a heavy application was given as it was felt that it would be easy to reduced the amount used in later experiments, provided the initial experiments were successful.

At the outset the difficulty presented itself of finding a simple, speedy, and accurate method of checking the results. As the greater part of the dead insects fall from the leaves either on to the ground or into the middle of the bush, where they cannot be found; it was decided to base our results on the number of living insects found on a number of treated bushes as compared to the number of insects found on the same number of untreated bushes. Children employed on the estate for catching *Helopeltis*, and hence thoroughly experienced in finding the insects, were used in the experiments. As a matter of interest it was decided to test the ability of these children in finding the insects on the bushes. Forty-eight bushes were therefore selected, four insects were added to them, so that there were at least 192 insects over the area under consideration. To this number must be added the number already present in the bushes. The children were then sent into the 48 bushes and instructed to collect as many insects as possible. The result of the first finding was only 74 insects; they were then required to repeat the find and returned after a second and third attempt with an extra 26 and 19 insects respectively per attempt. This gave a total number of insects found as 191 or 62 per cent of the number of insects actually added to the bushes.

In the following table, giving the details of the results secured, only the living insects found are recorded, for it will be understood that it was only possible to find a very small percentage of the numbers killed, for reasons already given. The table is as follows:—

No	Treatment	No. of lbs. per acre.	No. of bushes involved	Temperature		Relative Humidity.	No. of insects alive after treatment	
				Wet Bulb	Dry Bulb.		Larvæ	Adults
1.	'A' Dust ...	111	53	73	73	100	1	0
2.	'S' Dust ...	110	44	75	75	100	0	4
3.	Control ...	Nil	48	...	...	...	119 insects alive including adults and larvæ.	
4.	Control ...	Nil	43	68	68	100	28	20
5.	'A' Dust ...	100	120	68	68	100	0	0
6.	Control ...	Nil	30	...	...	...	13	30

DISCUSSION OF RESULTS

Though the methods employed in checking these results were of necessity rather crude, the evidence of large numbers of live *Helopeltis* individuals on the controls, as compared with the practical freedom of the treated bushes from them, indicates definitely that the material has a particularly high toxicity towards the particular insect under discussion. It would appear that the 'S' Dust is rather less effective in killing the insect, but it must be borne in mind that this 'S' Dust has only half the poisonous composition of the 'A' Dust, and in the experiments carried out less of the 'S' Dust was used per acre.

CONCLUSIONS

In these preliminary tests one important point has been demonstrated in a very clear manner, viz., the extreme toxicity of Calcium Cyanide to *Helopeltis*. Without undue optimism we can regard this fact as distinctly promising. However, when one remembers the successive failures which have accompanied any attempts to control *Helopeltis*, it is advisable to hesitate before making definite recommendations based on incomplete evidence. Thus, before advocating the use of Calcium Cyanide for the control of *Helopeltis* on tea estates under practical conditions, other important points must be subjected to rigid scientific and practical study. The following are some of the most important:

1. The whole economics of the situation, including a standard method for accurately expressing the degree of infestation, the determination of the actual reduction in yield of leaf following upon the different degrees of infestation; and (provided control experiments are successful) the minimum degree of infestation that will justify the adoption of such control measures.

2. The minimum dosage required per acre.

3. The minimum number of applications required and the intervals between such applications. This point is important, as it must deal with the insects hatched after the previous application of the insecticide.

4. The effect of dusting with and without a trailer; the best type of trailer to use and the most advantageous method of manipulation.

5. The dilution of the dust which will give the best results, i.e., whether it would be better to use a certain quantity of undiluted material or whether better results would be obtained by the use of a smaller quantity diluted to some appropriate extent with some convenient 'filler.'

6. The effect of other food plants and habitats of *Helopeltis* on an infestation.

7. The burning effect of the free hydrated lime remaining after the liberation of the hydrocyanic gas. This effect was noted during the experiments already described, and found to be nil; but this observation can hardly be claimed as conclusive owing to the fact that as periods of heavy rain were experienced after the application, it is more than possible that the hydrated lime was slaked at too rapid a rate to have any caustic effect, and it is further possible that a large percentage of the lime was washed away by the heavy rains.

It will be clear from the foregoing points that much work has still to be done with reference to the use of Calcium Cyanide as a controlling factor for *Helopeltis*; but it is hoped that all the points already mentioned, together with many others, will be made the subject matter of careful study at the earliest possible opportunity.

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

LETTER TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' Views)

Wireless Tea

THE EDITOR, 'THE PLANTERS' CHRONICLE', MADRAS.

SIR,

After reading the enclosed para from *Amateur Wireless* of July 3, I felt something must be done about it in Planting interests, and hope my Brother Planters will seriously consider the suggestions I make!! *'Vegetable growing by wireless energy is said to have been accomplished by an amateur gardener of West Bridgford. He accidentally discovered, it is stated, that tomato and cucumber plants were drawing energy from his aerial and making wonderful headway as a direct result of this activity.'*

The wonders of Wireless will sure never cease,
When Cucumbers even are forced to increase,
So why not Ye Planters get busy and see
If Aerial energy will buck up your Tea?

Attach to your Shade Trees Aerials tall
And then bring your Earth Lead for power to fall
Down to the Tap roots and Laterals too,
To increase your Flush and banish all 'Poo'.

For 'Assams' of course the Wave length must be
Totally different from small China Tea.
'Statics' on either are not yet understood,
But are thought just at present to help to make 'wood'.

Helopeltis and Eel Worm and similar Pests,
Will soon leave the Fields as unpaying guests.
And in all the papers you shortly will see,
Requests to the Public to drink 'Wireless Tea'.

When Agents their usual snorters do write,
The Wireless Planter will not get a fright;
His reply will be simple, 'My bushes *wont* flush,
Because of poor Programmes and excess of Mush.

Your V. A. will "spit" and quietly mutter,
I *don't* like the flavour that comes from Calcutta.
F. V. number two is better quite "rumbo,"
But nothing to touch the "Roosie" Colombo.'

When connecting your Earth Plate, precautions observe,
Lest 'Het' oscillations catch you 'on the curve'.
Beware of stray 'Xs' that wander around,
You're never quite safe till the've all 'gone to ground'.

Be careful that all your Electrons are fresh,
But sift them again on a Number ten mesh,
The smaller of these I need hardly relate,
Might slip through the 'grid' and land on the 'plate'.

Instruct your Conductors right through the Tote,
To carefully watch the effect of each note,
And steady the 'Bias' should music be muffled,
Though there's nothing like 'blasting' to get your Plant ruffled.

Experts have told us when Tea needs a rest,
It throughs out a 'Banji' which means 'that's my best',
But with 'leads' to each bush, Munro could deduce
Exactly what's wrong with the strength of the 'juice'.

A Microphone placed in our Withering Sheds,
Might Broad-cast 'Leaves snoring on Hessian Beds'.
Poor Devils, they know not the fate of to-morrow!
But Paragons bulky will dry up their sorrow.

And lastly our Coolies, by Nature so slow,
Will get tickled up by the currents that flow,
They'll go out to work with a rush and a dash,
And double their earnings by much extra cash.

'Poo' = Flower.

'F. V. number two' = 2 F. V. (Bombay).

'Rumbo' = Very much.

'Roosie' = Flavour.

'Blasting' = Overloading of Speaker or Phones.

'Mush' = Term in Wireless.

'Statics' = Atmospheric.

'Het' = A Super Heterodyne Set.

'Bias' = Grid Bias.

NILGIRIS, July 25, 1926.

Yours, etc., DANDY.

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending July 31, 1926

Bank Selling Demand Draft on London

26th	27th	28th	29th	30th	31st
17 29/32d.	17 29/32d.	17 29/32d.	17 29/32d.	17 29/32d.	17 7/8d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending July 10, 1926	January 1 to July 10, 1926	January 1 to July 10, 1925
		s. d.		s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING JULY 10, 1926)			N. India.	1 6.36	1 8.72	1 5.38
			S. India	**1 5.50	††1 8.91	††1 6.54
			Ceylon...	1 6.34	1 9.46	1 7.98
			Java ...	1 2.92	1 5.07	1 0.92
			Sumatra.	1 6.81	1 7.11	1 4.46
			Nyassa-land.	1 4.47	1 6.09	1 1.61
			Total ...	*1 5.77	†1 8.58	†1 5.83
(a) Anamalais—			(B) COFFEE			
Naduar ...	194	1 6	London Prices (seven days ending July 13, 1926)			
Periakarumalai ...	177	1 6				
Ani Erangel ..	315	1 5½				
Pannimade ...	226	1 5½				
(b) Central Travancore.						
Twyford and Ashley.	103	1 5½				
Glenmary ...	82	1 5½				
Woodlands ...	59	1 5½				
Caradygoody ...	200	1 5½				
(c) Coorg—						
Glen Lorna ...	43	1 4½				
(d) Kanan Devans—						
Perriavurrai ...	138	1 7				
Chundavurrai ...	173	1 6½				
Letchmi ...	120	1 6½				
Chokanadu ...	152	1 6				
(e) Mundakayam—						
Yendayar ...	106	1 4½				
(f) Mysore—						
Kadur T. & P. Co. ...	37	1 4½				
(g) Niligiris—						
Prospect ...	176	1 8½				
Bhawani ...	103	1 6½				
Ibex Lodge ...	82	1 6½				
Glendale ...	83	1 6½				
(h) Niligiri-Wynaad—						
Seaforth ...	139	1 6				
Newhope ...	112	1 4½				
Barwood ...	74	1 4				
(i) South Travancore—						
Braemore ...	88	1 5				
Merchiston ...	75	1 4½				
(j) Wynaad—						
Chulika ...	67	1 4½				
Elstone ...	36	1 3				

** Based on 5,759 packages.

†† „ „ 93,237 „

†† „ „ 93,616 „

* Based on 68,238 packages.

† „ „ 1,738,283 „

† „ „ 1,518,802 „

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, August 3, 1926, was 19½d.

(b) *Précis of Reports on the London Market received on Monday, August 2, and covering the seven days ending Tuesday, July 13 :—*

1. *Tea.*—The South Indian average fell by another 24*d.* during the week ending July 10 ; and is now 2½*d.* below the average for the corresponding week last year. The Indian Tea Association estimates the Northern Indian yield to the end of June 1926 at 86¼ million pounds as against 79¼ million and 65 million for the corresponding periods of 1925 and 1924. The auctions during the week ending July 10, were the first which were really representative of the new season's crop. The statistical position of the industry is still quite strong ; since the stocks in the United Kingdom at the end of June were 155 million pounds as against 178 million pounds on the same date in 1925 ; and the temporary depression may, we think, be largely, if not entirely, attributed to the disturbed conditions created by the undue prolongation of the Miners' Strike.

2. *Rubber.*—The market remained quiet and featureless during the seven days under review ; with a nominal 'spot' price round about the 1/8½*d.* mark. Stocks rose to 26,063 tons. The market at the period under review was an artificial one owing to the approaching end of the Restriction Quarter, and determination as to whether 100 per cent or only 80 per cent standard would be exportable during the ensuing three months. Thus, paradoxically, buyers were trying to keep the price up ; 'lest a worst ill should befall them', and the average for the May-July quarter prove to be less than the pivotal 1/9*d.* Equally paradoxically, the selling bulls were trying to force the price down so as to make the May-July average below 1/9*d.* and thus make the commodity scarcer, and therefore more valuable, during the next three months. Moreover, apart altogether from the Restriction Scheme it is quite probable that American Buyers do not wish to see a further fall in price ; because they are undoubtedly finding it difficult to get rid, without incurring serious losses, of the stocks which they accumulated when rubber was very considerably dearer than it is now.

3. *Coffee.*—The Indian offerings were mostly 1924 and 1925 crop and the prices fetched are given on the previous page. On July 10 stocks in London of African, Indian, and other kinds respectively were given in bags as 27,854, 14,857 and 103,955 as compared with 35,794, 40,818 and 130,295 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, July 25, 1926, to Saturday, July 31, 1926 (both days inclusive)

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	5·01	39·15	44·16	19. Naduvattam	N.R.	45·90	R.N.
2. Kalthuritty.	10·41	54·12	64·53	20. Coonoor ...	2·19	7·44	9·63
3. Tenmalai ...	9·79	62·86	72·65	21. Kotagiri ...	5·87	14·64	20·51
4. Mundakayam.	15·60	58·14	73·74	22. Ootacamund	3·51	22·23	25·74
5. Peermade ...	20·21	79·27	99·48	23. Yercaud ...	1·51	20·81	22·32
6. Twyford ...	20·15	88·94	109·09	24. Devala ...	13·43	72·58	86·01
7. V'periyar ...	6·56	36·44	43·00	25. Gudalur ...	7·30	40·91	48·21
8. Kalaar ...	19·57	74·49	94·06	26. CALICUT ...	14·70	62·91	77·61
9. Chittuvurrai	1·69	17·49	19·18	27. Kuttiyadi ...	22·54	71·55	94·09
10. BODI'KANUR	0·40	4·74	5·14	28. Vayittiri ...	20·59	97·46	118·05
11. COCHIN	10·70	63·13	73·83	29. Manantoddi.	18·21	42·98	61·19
12. Mooply Valley.	13·89	68·31	82·20	30. Billigiris ...	3·52	15·25	18·77
13. Pachaimalai.	11·45	50·65	62·10	31. Sidapur ...	5·10	38·07	43·17
14. Mudis ...	25·38	94·64	120·02	32. Pollibetta ...	8·23	49·33	57·56
15. Nell'pathy...	13·10	34·72	47·82	33. Somwarpett.	6·32	24·23	30·55
16. POLLACHINE	0·67	8·56	9·23	34. Ballupete ...	8·60	22·92	31·52
17. Manjeri ...	14·09	62·83	76·92	35. MANGALORE	13·07	54·09	67·16
18. Nilambur ...	12·28	58·09	70·37	36. MADRAS ...	0·53	2·77	3·30

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, No. 33] SAT., AUGUST 14, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	535	Letters to the Editor—	
The Genesis of the U.P.A.S.I.	537	A. Hydrometeorological Verse	551
Ca (CN) ₂ as a pesticide ...	538	B. and C. Past Secretaries of	
The Planting Produce Market ..	545	the W.P.A. ...	552
Shevaroy District Notes ...	548	D. Venue of the 1927	
District Assoc. Meetings—		U.P.A.S.C. Meet ...	553
A. Wynaad ...	550	All India Rugby Tournament.	554
B. Nelliampathies ...	551	Commercial and Meteorological.	555

EDITORIAL NOTES

The Marquis of Linlithgow, President of the Royal Commission on Agriculture, and the English Members of the Commission are due to arrive in India about the beginning of October, and intend to proceed at once to Simla, where, in consultation with their Indian colleagues, the plans for the enquiry entrusted to them will be finally arranged. The Commission expects to take oral evidence in Bombay and the Central Provinces, and then to proceed in the latter half of November to the Madras Presidency where about twelve days will be spent in examining some thirty witnesses in Madras City and in inspecting the Agricultural Farms at Coimbatore. We understand that the following gentlemen have been constituted as a Committee to formulate the general outlines of the evidence to be tendered to the Commission when it arrives here:—Mr. R. D. Anstead, Director of Agriculture; Mr. J. Gray, I. C. S., Registrar of Co-operative Societies; Mr. N. Macmichael, I. C. S., First Member of the Board of Revenue; Mr. V. Pandrang Rao, I. C. S., Secretary to Government, Development Department; Dewan Bahadur C. Arunachella Moodelliar of Chunampet; Mr. Muthukumarappa Reddiyar of Kayapakkam; Mr. M. T. Subramania Moodelliar of Uttamapalayam; the Zemindar of Mirzapuram; and Rao Bahadur C. V. S. Narasimha Razu.

The Rubber Trades Association has officially announced that the average price of Spot First Crepe Plantation Rubber for the Restriction Quarter commencing May 1, 1926, was 1/9.001d.; and consequently the exportable allowance of Standard Production at the minimum rate of duty during the quarter which began on Sunday the 1st instant will remain at 100 per cent, and not be reduced to 80 per cent as would have happened if the average price for the preceding quarter had been 0.002d. less. Our Readers may remember that in our Editorial Notes of the 31st ulto. we gave a table of the Quarterly Average Prices which have obtained since the introduction of the Restriction Scheme on November 1, 1922. In this connection we note that Reuter cabled last Saturday that the Colonial Office

has decided that the exportable percentage of Standard will be reduced to 80 for the ensuing November-January Restriction quarter if the average 'spot' price for the August-October period falls below 1/9d.

Through the courtesy of Mr. R. B. Carrick, Honorary Secretary for *All India Rugby* Rugger, Madras Gymkhana Club, we are able to publish on *Tournament—* Page 554 some interesting particulars regarding the Rug-
1926 ger Tournament to be held in Madras in October next.

It would appear that South India in general, and perhaps North Mysore in particular, are not alone at present in opening up fresh areas with tea. At any rate, *The Times of India* of the 23rd ultimo states that preparations are afoot in Ceylon to bring some 15,000 to 20,000 acres under tea cultivation; chiefly in Uva and in the Morawak Korale. It is, therefore, reassuring for any one who may fear the appearance of that bugbear a 'glut in the market' to recall that within three years Sir Charles Higham has effected a four-fold increase in the consumption of Indian tea in the United States, that Australia is taking continually increasing quantities, and that the demand from the Continent generally and Russia (which imported just on 23½ million pounds last year as against under twelve million pounds in 1924) in particular is becoming keener every month. The consumption in India itself is also on the increase; thanks largely to the Rs. 450,000 which Mr. John Harpur, the Indian Tea Cess Commissioner, is spending annually on behalf of the Indian Tea Cess Committee in advertising tea. Having consummated his arrangements with regard to supplies for the Railways in the South; he is now, we understand, concentrating on the East Indian, North-Western, and B. B. and C. I. Railways, and in the towns which they serve, and also inaugurating experimental operations designed to push the sale of tea in Assam.

It is certainly surprising to find that Malaya only exported 27,554 tons of rubber in June when the permissible exports were 100 per cent standard as against 27,657 tons in June 1925 when the percentage of standard which could be exported was only 65 per cent, but the exact significance of the anomalous decrease in exports cannot of course be properly appraised in the absence of any information regarding the quantity which has been deliberately withheld from shipment and stored on estates in anticipation of higher prices to come.

The June issue of *The Tea and Coffee Trade Journal* gives the following statistics of the Imports of Coffee into Germany; and states that the figures for 1923, 1924 and 1925 may be taken as indicative of internal consumption since practically no Coffee was re-exported during those three years:—

		1913	1923	1924	1925
		<i>Bags</i>	<i>Bags</i>	<i>Bags</i>	<i>Bags</i>
Brazil	...	115,949	28,948	26,619	38,995
Colombia	...	2,793	205	716	2,572
Costa Rica	...	2,963	293	2,465	4,393
Guatemala	...	21,536	4,674	12,592	19,236
Mexico	...	4,142	641	1,905	5,686
Nicaragua	...	729	32	251	499
Haiti	...	225	6	68	210
Salvador	...	3,010	1,180	3,222	6,212
Venezuela	...	5,694	1,526	2,790	5,223
British India	...	2,899	287	755	1,372
Dutch India	...	5,852	581	2,632	3,622
Other	...	2,458	357	1,312	2,423
Total	...	168,250	38,730	55,327	90,443

THE GENESIS OF THE U.P.A.S.I.

Before our next issue reaches the majority of our Readers, the United Planters' Association of Southern India will have arrived at another milestone in its career, for on the 23rd instant it will be assembled in Annual General Meeting at Bangalore. The occasion will be the Thirty-third Annual General Meeting of the Association; and by a little mental arithmetic we calculated that its first Annual General Meeting must have been held in 1894. The U.P.A.S.I. archives confirm our finding; and moreover inform us that that inaugural meeting was the outcome of a Planters' Conference held from Monday, August 28, 1893 to Thursday, August 31, 1893 (both days inclusive) in the Cubbon Rooms at Bangalore, under the Presidency of Mr. Digby T. Brett who, with Mr. L. D. Colledge, represented the North Mysore P. A.

The 1893 Conference was a typical example of the tenacity which has ever characterized the Planting Community as custodian of the great traditions created by the stalwart pioneers who founded it in the 18th Century and indeed in the later years of the 17th, and by their sturdy successors who consolidated it during the succeeding hundred years. In July 1893 the Government of India published their reply to a memorial signed by the then Honorary Secretaries of the Coorg, Kotagiri, North Mysore, Shevaroy, South Mysore, South Wynaad and Travancore Planters' Associations which had been submitted in March 1892 to the Viceroy, the Marquis of Lansdowne, G.C.M.G., through the Government of Madras. The memorial pointed out that Act XIII of 1859 did not adequately safeguard the petitioners against malfeasant defaulting labour contractors and suggested amendments (a) to make it clear that contracts between maistries and coolies for work to be done on coffee, cinchona, and tea estates came within the cognizance of the Act, (b) to render employees who failed to fulfil their contract legally liable for the due performance of the work in respect of which they were in default, (c) to make the acceptance of an advance by the employee a contract *ipso facto* of service for one month (d) to transfer the onus of arresting defaulters from Revenue Peons to the Police and (e) to provide that defaulting maistries should be placed on exactly the same footing as defaulting bankrupts in the insolvency courts. It also requested that offences under the Act should be made extraditable; so that defaulters would no longer be able to evade arrest by crossing the boundary into British India from a Native State such as Mysore. The reply of the Government of India was merely an unqualified and extremely curt refusal to accept any of the proposals made in the memorial; with the sole, and comparatively unimportant, exception, that it consented to issue orders that the execution of processes under the Act was in future to be performed by the Police.

The Planters naturally refused to lie down under such a rebuff and their leaders wisely realized that it was a case of 'United we stand, divided we fall'; and that the most practical way of showing the Government that they meant business was to found—to quote the Circular which Mr. D. T. Brett issued on July 29, 1893, to the various Associations—'One Representative Chief Association for the whole of South India in addition to the already existing (District) Planting Associations, as **in unity lies our strength.**' Incidentally we imagine that the last five words of the quotation might possibly have been chosen as the motto of the U.P.A.S.I., if it had not been that their Latin equivalent *Unitas Salus Nostra* had already been adopted by the Ceylon Planters' Association which, we believe, came into existence not later than 1854. However that may be,

the founders of the Association on the suggestion we understand of Mr. George Romilly who became the 1st Planting Member in 1894 chose the 'E Terra in Terras' which is so familiar to our Readers to-day.

The Planters' efforts were not in vain. As an outcome of the Conference of 1893 the Governor of Madras, Lord Wenlock, received a deputation to which he entrusted the drafting of a bill embodying the amendments which the Planters desired in Act XIII; but his Government had eventually to relinquish 'with great reluctance' any idea of passing such a Bill into law owing to the compromisingly hostile attitude which the Government of India still maintained. 'With great reluctance' is significant and denoted a complete volte face; for it subsequently transpired that the Civilian Chief Secretary to the Madras Government when forwarding to the Government of India the original memorial of 1892 had uncompromisingly condemned every proposal it made. In due course, under persevering and tactful leadership, the Association gained the ear of the Government of India; for in 1895 the Viceroy, Lord Elgin, received a deputation which resulted in the appointment of the 1896 Planters' Enquiry Committee, whose report at long last paved the way for the Madras Planters' Labour Act of 1903.

As the Association is now about to hold an Annual Meeting in the heyday of its vigour, we trust that this short account of its genesis and gradual rise to recognition as a really important Representative Body will not be considered inopportune.

THE UTILIZATION OF CALCIUM CYANIDE IN THE CONTROL OF INSECT AND RODENT PESTS IN INDIA

BY

W. H. BRITTAIN, Ph. D.

*(Communicated for publication by Dr. W. S. Shaw, Tea Scientific Officer,
U. P. A. S. I.)*

INTRODUCTION

During the past six months the writer has been engaged in investigating the uses of Calcium Cyanide in India and Ceylon. Unfortunately, during the season occupied in this research many pests were not available for study. Hence any discussion of the subject can only be regarded as incomplete. Nevertheless, sufficient has been accomplished, taken together with the work of entomologists and others resident in the country, to indicate a wide range of usefulness for the material in India.

As more technical accounts of the experiments undertaken are to be published elsewhere, the following article deals only with the general uses of the material and the method of its application.

COMPOSITION AND USES

As this subject has already been discussed at some length in another article, a brief resumé for the sake of completeness, is all that is considered necessary at this point.

Calcium cyanide owes its value in insect and rodent control to the fact that, when exposed to the air, it is acted upon by the atmospheric water vapour forming hydrocyanic acid gas (prussic acid) leaving behind a harmless residue consisting mainly of ordinary slaked lime. It occurs commercially in various grades suitable for different purposes.

'A' grade is used for the control of rats, white ants and other burrowing animals, also for dusting various crops for the control of plant lice, thrips, leaf hoppers, plant bugs, etc., as well as certain beetles, caterpillars and other leaf-eating insects. This grade is a fine dust, about 80 per cent of which passes through a 200 mesh screen.

Granular Calcium cyanide which is used as a soil insecticide for cockchafer larvæ, wire worms, the pupæ of certain caterpillars, etc.; as well as for certain burrowing animals, consists of particles about the size of coarse coffee grains.

'G' grade, which in particle size comes between the two foregoing grades, is used for indoor fumigation and also for treating ant nests.

These three grades are all guaranteed to contain not less than 40 per cent and not more than 50 per cent of pure Calcium cyanide, but in addition there are two other grades consisting of 'A' dust mixed with finely divided sulphur in the proportion of 25 per cent and 50 per cent and known as 'Citrus Dust' and 'S-Dusting Mixture' respectively. These are used on crops where it desired to combine fungicidal and acaricidal (i. e. for 'red spider', etc.) properties.

APPLICATORS

There are a number of pumps or blowers specially designed for the application of this material and suitable for different purposes.

1. *The 'Cyanogas Hand Duster.'*—A small but convenient duster suitable for garden use in dusting plants infested with insects.

2. *The 'Cyanogas Foot-Pump.'*—This pump is designed for the treatment of rat burrow, termite mounds, etc. For this purpose it is very simple and effective, and the fact that it can also be used on a small scale for dusting plants about the bungalow garden makes it a very useful instrument. This pump comes in two sizes designated 'large' and 'small' containing approximately four and two pounds respectively. The large size is to be preferred when treating field rats or termite mounds on a large scale.

3. *The 'Cyanogas Knapsack Pump.'*—This is a pump of larger capacity carried on the back of the operator. It is designed for dusting field crops, tea, etc., and is a very efficient and easily worked machine.

4. Several other types are available which will be found described in the catalogue of the manufacturing company.

USE OF CALCIUM CYANIDE AGAINST BURROWING RODENTS

Various species of rats and of bandicoots or mole rats are found injuring field crops and stored grain in different parts of India. Certain species are characteristic of certain regions and of definite types of location and they often differ from one another in habits in important particulars. Thus the common field rat of the Punjab is *Gerbillus indicus*; the most common rat found about Goods Sheds in Calcutta is *Mus decumanus*; the mole rat that abounds in grassy places, lawns, cane fields, etc., in the Punjab is *Nesocia hardwicki*, the corresponding species in Bengal and many other localities is *Nesocia bengalensis* and in Sind, *Gunomys indicus*. The common species of field rats leave their burrows open, whereas mole rats close them with mounds of earth.

Control of Rats about Godowns and Goods Sheds.—In some cases where proper 'rat proof floors' are provided the burrows of the rats will be confined to

the outside of the building. In other cases cracks in the flooring permit the rats to burrow up through the floor and burrows will be found both inside and outside the building. In either case the successful treatment of rats under these conditions is a relatively simple matter. If the soil is very dry or if burrows occur in the concrete it will be necessary to provide wet mud to stop up the holes. This should be placed about in convenient piles previous to starting the work. If desired the material may simply be placed well down in the burrows with a spoon and the holes stopped up with mud, but more rapid, more efficient and more economical work can be done with the foot-pump.

The delivery tube of the machine is placed in the burrow, the soil pressed around it and the pumping commenced. As soon as pumping starts dust will be seen issuing from a number of holes indicating that they connect with the same system. These holes should be stopped up to retain the gas and the other burrows treated in a similar manner. Thus it is not necessary to treat every hole in a system and the exact number that it is necessary to treat will be largely a matter of experience, but as a guide it may be said that if the dust is seen emerging from an opening as far distant as fifteen feet from the one treated it should be inserted at that point and the pumping continued, and so on at similar intervals, in order to secure sufficient concentration to be sure of killing all the rats. In using a spoon one to two ounces is placed in each burrow. With the pump about fifteen good deliveries for each opening treated will be sufficient. Where the soil is moist it will not be necessary to provide wet mud, it being sufficient to press in the soil with the foot or with the digging tool.

By proceeding in the manner described it will be possible to go over a series of sheds in a remarkably short space of time, one operator being able to treat 150 openings in an hour without difficulty.

Control of Field Rats.—The method followed in destroying field rats that injure crops is quite similar to the foregoing. The material is pumped into the burrows and the openings stopped with earth, either by pressing it in with the foot or by the use of a digging tool in the hands of a coolie. It is best to do a field systematically and if several machines are available the different workers spreading out and working towards each other there is no reason why the rats over a given area cannot all be destroyed. The material works almost instantly. If a rat is seen at the mouth of its burrow and the delivery tube is quickly thrust in, a few vigorous pumps given and the burrow immediately dug out, the dead body will usually be found within a very short distance of the opening.

In order to satisfy oneself that good work is being done, it is a very good plan to excavate a number of burrows and note the dead bodies of the rats. Examination should be made where fresh earth is turned up, as by no means all the burrows are inhabited. Another practical method of checking up the results secured is to place a small stake in the mouth of the treated burrows and to note the number that are opened next day. If an equal number of untreated holes are stopped up and treated similarly, we then have a good standard for comparison. Where the work has been properly done, we have only rarely had treated holes reopened. It should be noted, however, that migrant rats will often reopen these holes and for this reason considerable areas should always be treated. Where we have found opened holes after treatment, it has invariably been on the edge of the treated area,

Control of Rats in Bunds.—The bunds of paddy fields are frequently perforated by these pests, that not only feed upon the crop but frequently cause the inundation of the fields. They also bore in the embankments along river banks, sometimes causing floods. In periods when the water level is low the foot-pump may be used to advantage, but when it is low and the rats are in shallow burrows it is difficult to use the foot-pump and the method of placing the material down in the burrow with a spoon and of closing the entrance hole is to be preferred.

The Treatment of Rat Burrows in Wet Soil Generally.—In other situations in addition to bunds, as often occurs in cane fields, during the monsoon, the use of the spoon method is more convenient than that of the foot-pump. Some prefer the use of the granular material at this time and, as the burrows are usually shallow, a much smaller amount of material will be required than under other conditions.

The exact amount depends upon the depth and extent of the burrows and is best determined by experience.

The Control of Mole Rats.—As mole rats do not leave open burrows it is necessary to open up with the digging tool an opening for the insertion of the delivery pipe. In many cases the runways of the animals are so shallow that the dust can be seen emerging through the soil at various points and it may be possible to tell fairly accurately just how far the material is penetrating throughout the system. Otherwise holes may be opened up at intervals of 15 to 25 ft., the pipe inserted in one hole, pumping continued until the dust issues from the next nearest hole, the first one closed, the pumping started at the second, and so on until the whole system is completed.

The best time for control operations on mole rats is in the morning. As these animals make a very extensive system of burrows and not all are inhabited it may require a wasteful expenditure of material to destroy a single animal, if the work is done blindly. In the morning the presence of freshly turned earth indicates where the animals are working and, at this time, the animals are often seen at the mouths of their burrows. By inserting the tube in these places and doing a little pumping we have often dug out the dead body of the pest within three or four feet of the opening. For people who are troubled with mole rats it is best to have constantly on hand a pump with a supply of material. This should be used whenever the freshly thrown up earth is observed, thus keeping the pest in check with a trifling cost of time and material.

The control of the mole rat without the use of a pump may be successfully accomplished by opening the runway about every five feet, placing inside $\frac{1}{2}$ to 1 oz. of the material with a spoon and stopping up the hole. Granular material is preferred for this purpose.

The Control, of Field Mice, Ground Squirrels, and Porcupines.—In destroying field mice the use of the foot-pumps usually advised as for field rats. For ground squirrels and porcupines the spoon method of treatment, by placing the material well down in the burrow and stopping up the entrance, is the one used. It might be supposed that such large animals as porcupines would be difficult to kill but such is not the case.

THE CONTROL OF LAND CRABS

Land crabs do similar damage to rats in the bunds of paddy fields, perforating them, as well as actually feeding upon the crop. They are treated in exactly the same way as rats in the same situations, viz., by placing one-half teaspoonful of material in the burrow with a long-handled spoon and closing the opening. A hole so treated is never again occupied by other crops.

THE CONTROL OF ANTS

Various species of true ants, black and red, constitute a serious nuisance in gardens, lawns, etc. Other species make a nest by sewing together the leaves of plants. All these species have shown themselves to be very amenable to control with small quantities of calcium cyanide.

In cases of those species in which the opening of the nest is large enough to permit the entrance of the delivery tube of the foot-pump a few puffs of dust is all that is necessary to destroy the entire colony, the entrance hole being closed up after treatment. For nests too small to permit of the use of the pump, but with moderately large openings a pinch of the material placed in the entrance will usually suffice. For nests with still smaller openings it may be necessary to make a hole into the centre with a small stick and pour in the material with a small funnel. For this purpose the 'G' grade is the most satisfactory as it will flow like sand into the nests, but in its absence we have used the 'A' or the granular with success. After treatment the holes are always shut. In gardens or cultivated ground where it is possible to turn over the soil with the spade, we have often done so and simply worked a small amount of the material into the soil and covered over with earth again. This method also was invariably successful.

In cases where the insects are established in lawns or greens, there is danger, unless due precautions are taken, of injuring the grass, but this is easily avoided by taking care not to drop any material on the grass when treating the mounds. It has been shown that the material works best when the soil is damp. As however, the insects are usually most active during the rains, there will usually be little difficulty on this point. Where necessary, however, the green may be watered and rolled the evening *before the work is to be done*.

It is well to go over the area treated about a week after the work has been performed in order to finish off any nest that have been missed or that have been ineffectively treated.

For the leaf-nesting species a pinch of material placed inside will quickly destroy all the inmates.

The Control of Mound Building Termites or White Ants.—These ubiquitous pests have been the subject of special research on the part of the writer in India and satisfactory methods of dealing with them have been developed. Where the mounds are small the task is an easy one and even where they are of a very large size careful preparation will ensure success. It is of importance to note that good results cannot be expected when the work is done during very dry weather or when there is no sign of activity at the surface. At this time the small tunnels between the different parts of the nest are largely sealed up, preventing the penetration of the gas.

In treating the smaller nests quickly open up with the digging tool one of the tunnels, insert the delivery pipe of the pump and pump until it appears that the area reached from that point has been thoroughly 'gassed.' If the colony consists of a single fungous garden or 'nest' it may only be necessary to treat a single tunnel, but, where many occur, the more that are treated the more certain is the success of the method. Colonies have been treated varying from those with a single fungous garden requiring as little as an ounce or less introduced into a single opening, to colonies containing many fungous gardens spread over an area eighteen or more feet in diameter, requiring a dosage of two pounds or more, introduced at from six to twenty distinct points. The exact dosage to give and the number of points at which the material should be introduced depends upon the size, form and general character of the nest and its determination will be largely a matter of experience.

The general form of the colonies to be treated may vary considerably. In some cases there is a single, high, more or less upright mound, though it should be noted that there may be fungous gardens well outside the area indicated by the surface mound, but, nevertheless, the colony is fairly compact. In other cases the colony is very diffuse, large numbers of smaller mounds, indicating the presence of fungous gardens beneath, being spread over a considerable area. In the first case it will not be necessary to introduce the dust at so many points as in the second, though care should be taken to see that those fungous gardens outside the apparent area, as indicated by the surface mound, are thoroughly 'gassed.' It is inattention to this important detail that results in partial failure. In the case of those mounds of the more diffuse type the larger the number of fungous gardens into which the dust is directly placed, the better are the chances of completely exterminating the colony. The best practice is to pump a little dust into several of the holes, reserving the main pumping for that point which appears to result in the maximum amount of gassing of the entire colony.

When the ground is dry it may be necessary to make up some wet mud with a little earth and water for use in stopping up the holes through which dust emerges. If, however, the work is done at the commencement of the rains when the soil is moist this will not be necessary.

Where mounds occur in lawns, gardens, mud-floored godowns, etc., they are not only unsightly, but a source of interference. For this reason the usual practice is to level them to the ground after treatment, but the logical procedure is to first level the mound, destroy the insects in the exposed fungous gardens by blowing a little dust over them and finally to treat those below the ground level with the pump in the usual manner. This renders the work easier, open up the passages to the deeper fungous gardens and allows for the destruction of the colony with the expenditure of much less material. In some cases the colony may be in a place where it is impossible to level the nest on account of interference with growing plants, etc., in which case it is only necessary to proceed in the ordinary way, but more material will be needed to produce the same result. It will be found that in going over a given area the first time, a relatively large amount of material may be required, but that subsequent treatments to complete the destruction of partial failures and to destroy any newly established nests will be trifling. A supply of material together with a

suitable pump kept constantly on hand will ensure that these pests can be kept down without difficulty and at a slight cost.

It should be especially emphasized that the practice so often followed of digging out and destroying the queens is inadequate, for the occurrence of 'substitute queens' allows for the re-establishment of the colonies and, for this reason, it is necessary to destroy the brood as well. It may well be true that in a large colony the digging out of the nest and the destruction of the queen may result in a severe setback to the colony, which may be a long time in attaining its former size, but this method is not only unsatisfactory but is really more expensive than the calcium cyanide method.

OTHER USES

Promising tests of the material have been made against plant bugs such as the tea-mosquito and other species that attack vegetables, etc., against leaf-hoppers such as the mango hopper, against plant lice, thrips, psyllas and other insects that suck the juice of plants, against certain caterpillars and beetles that devour the foliage, against soil insects such as the pupæ of certain caterpillars and the larvæ of cockchafer, as a barrier against swarming caterpillars and bugs and many others too numerous to mention. Furthermore intensive research is being conducted along the foregoing and many other lines, that may be expected to yield important results.

THE VALUE OF CALCIUM CYANIDE FOR GARDEN USE

A special section is given to this subject on account of the unique position that this material occupies as a general garden insecticide. Others may be as valuable for certain purposes but the writer is aware of no other material that will at the same time destroy ants, termites, bandicoots, rats, snails, leeches, in addition to the many other pests indicated in the foregoing. Indeed there are few insects found about the bungalow garden that cannot be taken care of, provided that a can of dust and a pump are available. Garden plants generally should be treated when the leaves are dry, at which time most varieties can be dusted without injury. In dusting in on any plant for which it has not been expressly recommended, however, it is wise to proceed with caution until it is evident that the plant will not be injured by the material.

CONCLUSION

Calcium cyanide has been found to have a wide range of usefulness as an insecticide and rodent killer in India. It is easily transported, simply and quickly applied, requires no mixing and after exposure the poisonous property disappears leaving a non-poisonous residue. Furthermore, suitable apparatus has been designed for its application that is lighter, less complicated, cheaper and has a longer life than the corresponding machines used in applying liquid sprays.

Users should note that while the material is quite safe to use in the open air, it is, at the same time, a deadly poison and should be kept in a safe place, away from irresponsible people, when not in use.

PLANTING PRODUCE

IN THE

LONDON MARKET

Messrs. Leslie and Anderson send us by this week's Mail the following very interesting review, dated June 30, 1926, of the London Market for Planting Produce during the second quarter of the current calendar year :—

COFFEE

Prices in our market since the issue of our last Report have steadily appreciated. Buyers during the early months of this season seemed indifferent in regard to the shortness of supply of East Indias and competed for only the best qualities, but the scarcity is now being realized. Recent shipments offered in auctions have met good competition, though much inferior in appearance to the Coffees available in March, and have realized very full prices—as indicated in our spot valuations below.

Small quantities of Kenya Coffees continue to arrive, and are realizing full prices, according to quality.

We hear very little so far in regard to business in Bukoba Plantation or Native (E.A.), though we understand the Crop is a full average one. The absence of offers is, we believe, due to heavy rains in that district, retarding despatches to the coast. This Coffee should command a ready sale coming to market as it does between seasons.

Brazilian Crops.—In view of the control of arrivals at the ports it continues to be difficult to obtain accurate estimates of supplies available—those to hand varying according to the interests involved—producers and consumers—but taking an impartial view we conclude that the total Brazilian growth (Santos, Rio and Victoria Crops) for the season 1925/6 now ended is unlikely to be in excess of $13\frac{1}{2}$ millions of bags. The Mild Coffee Crops for the same period can be fairly estimated at about 7,000,000 bags. The world consumption figures at June 30 when published are likely to be in excess of 22,000,000, so that there has probably been a reduction of 1 to $1\frac{1}{2}$ million of bags in the Visible Supply figures of June 1925, though the stocks in upcountry warehouses in Brazil may not be reduced to the same extent. If these estimates are approximately correct there should be no excess supply of coffees available during the period July 1926/ June 1927. **We look then for a maintenance of current values for another twelve months**, more especially seeing the present estimates of the Mild Crops for next season in Central America are reported to be lower than the total picked in 1925/6, owing to drought in that quarter. The only further point for consideration at the moment is the success or failure of the Brazilian flowering for the 1926/7 Crop during August/September. If this should be favourable we might expect a large yield and this would undoubtedly affect values towards the end of the year and onwards, but if weather conditions were unfavourable, resulting in a moderate or poor yield, the movement in prices would certainly be upward.

A further £5,000,000 Brazilian Loan has recently been successfully floated. The security for this loan is based on Brazilian Government Bonds—not on actual coffee. Seeing, however, the price of coffee so deeply

affects the Brazilian Budget we may assume that this further sum may be available to support Coffee 'Interests' if necessary.

We are very pleased to hear that next season's crop prospects in Mysore and Coorg are generally good, but regret that the reports from the Nilgiri, Shevaroy's and Anamalai districts are not so encouraging.

We quote spot prices current in London as follows :—

East India—Medium to Fine Bold	'A' size—	140/- to 165/-	per cwt.
do. Ordinary to Low	...	120/- „ 130/-	„
Costa Rica—Good to Fine Bold	... 'A'	165/- „ 200/-	„
do. Ordinary to Low	...	120/- „ 145/-	„
Kenya—Good to Fine	... 'A'	125/- „ 145/-	„
do. Ordinary to Low	...	100/- „ 120/-	„
Santos Superior C. & F.	... ..	102/-	„

Statement of the Imports, Deliveries and Stocks of Coffee at the Port of London for the 25 weeks of the year 1926

	Landed.		Home Cons.		Export.		Stock.		
	1926	1925	1926	1925	1926	1925	1926	1925	1924
COFFEE—									
British West Indies ... tons	56	108	40	45	51	6	50	109	27
British East Indies ...	1,132	4,036	802	716	838	300	1,158	3,071	743
Total British Plantation ...	1,188	4,144	842	761	889	304	1,208	3,180	770
Mocha ...	258	713	243	311	61	141	231	610	253
Foreign East India ...	251	929	312	792	123	51	407	622	186
Brazil ...	193	330	362	404	263	59	675	609	615
Colombian ...	258	927	212	434	328	143	437	876	264
Costa Rica ...	10,048	8,856	3,515	2,992	2,353	1,959	5,124	5,044	4,996
Guatemala, etc.	686	1,155	211	249	426	163	742	1,108	921
African	5,226	5,051	3,750	3,292	1,620	340	2,396	2,748	2,559
Total Foreign ...	16,920	17,961	8,585	8,474	6,074	2,856	10,012	11,617	9,794
Grand Total ...	18,108	22,105	9,427	9,235	6,963	3,162	11,220	14,797	10,561

CARDAMOMS

With increased arrivals, attracted no doubt by the high prices ruling in this market, prices are slightly easier, as anticipated in our last Report. The fine bold white silky descriptions, imported from Tuticorin, continue to realize full prices, whilst 'Mangalores,' being less attractive to the eye though, in most cases, containing fine black seed, have latterly been marketed on a lower basis.

We quote—Spot Terms :—

Fine Bold White Silky from Tuticorin	...	8/3 per lb.
MYSORE PLANTATION (Cured) Medium Bold	6/- to 6/6	„
do. Reds and Splits	4/- „ 4/6	„
do. Smalls	3/6 „ 4/-	„
do. Seeds good	5/6	„
ALLEPPY GREENS	...	4/- „

PEPPER

Prices since our last Report have fluctuated within narrow limits, with a quiet market. Supplies held in producing countries are reported to be very moderate while new Crops, even if normal, would seem to be insufficient to meet the total of the world's average annual consumption, so we look for a repetition of last season's appreciation in values when the Crops are available in the autumn. Stocks in London are large and held at prices probably considerably higher than those ruling to-day, but they are reported to be in strong hands, and the East are not sellers at current prices.

We quote :—

TELLICHERRY BLACK, Spot	...	nominal	1/-	per lb.
do. August/October (London)	..		112/6	per cwt.C.F.I.
The Price in Tellicherry is	...		125/-	.. ..
ALLEPPY BLACK Aug./Oct. (London)	nominal		110/-	.. ..
The Price in Alleppy is	...		No Sellers.	

London stock (Black Pepper) 5,680 tons against 2,232 tons same date last year.

TEA

Prices at auctions during the past three months have been steady, on a satisfactory level, but a fortnight ago a decided change in sentiment appeared in the market. There has been a weak tone at recent sales, especially in the medium and lower grades of Teas. All we can learn points to anxiety on the part of some of the largest importers to dispose of their stocks and recent arrivals of old Crop teas in view of the approach of arrivals of the New Season's Crop from Northern India, with the result that something akin to forced sales has knocked prices down about 3d. per lb. for Broken Pekoe, etc. Much of the Tea offered has no doubt been of poor quality, as customary at this season, but, in addition, orders from the industrial districts have been lacking owing to the continuance of the Coal Strike and generally poor trade. We look on the present depression as temporary and, while confidence is shaken, there should be some recovery when our Coal Strike troubles are over, if shipments of new Crop are not excessive.

RUBBER

Values have declined since we last reported, but after touching 1/7 per lb. early this month have shown more steadiness with a slight recovery. It is interesting to note that the more distant positions show a premium on near months, so it would appear speculators are disinclined to take liberties with the market for future deliveries. Shipments from the East, with the 100 per cent production at present in operation under the Stevenson Scheme, are not yet excessive, and it remains to be seen whether they can be greatly increased; the general opinion appears to be that production and consumption at the moment are about balanced. The question of future prices hinges then on the American demand, which seems unlikely to expand during the fall of the year, though there is no sign of slackening in their motor industry.

We quote :—

PLANTATION SMOKED SHEETS, Spot	...	...	1/8½	per lb.
do. Equal Monthly Deliveries, July/Sept.	...		1/8½	..
do. do. Oct./Dec.	...		1/9	..
do. do. Jan./Mar. 1927			1/9½	..

London Stock 23,645 tons—same date last year 5,078 tons.

DISTRICT NOTES

Shevaroy's

SOCIAL

Our Season is over at last ; and, notwithstanding the fact that so many residents are in England, it has been fairly lively this year. We have not however entirely retired into our shells, as the ' Magpie Troupe ' (all residents of Yercaud) gave us two Entertainments, on the 29th and 30th, which apparently were much appreciated. Unless however they can find time to get up another show before the end of the year this will probably be the last bit of diversion till next Season, which we are already looking forward to with pleasurable anticipation for not only will all our Home departed friends be with us again but we hear those talented artists, Mr. and Mrs. G. D'Silva hope to come to these Hills which means that some good things will be staged in our little ' Theatre'.

COFFEE

Most of us are busy now finishing our Handling and Planting. The weather has not been too favourable for the latter, for after the heavy falls on June 7 and 8 we have had very little rain ; though there have been no long spells of drought, so that the young plants are not suffering. On the whole the coffee trees are looking very well, and hold out promises of a good crop next year. As reported by me at the time, the blossom was a failure on most estates owing to the heavy rain in January, but now that Handling is opening out the trees, crop is showing up a bit and estimates, which of course are very small, may be slightly exceeded. It makes one think the setting has been better than in most years. I think most Planters on these Hills find it difficult this year to provide work for women for owing to small crops manure programmes have been cut down and the weather does not seem to encourage the growth of weeds.

We were told at the last U.P.A.S.I. Meeting that Java had got well away with grafting coffee. I wonder if any Planters in South India have experimented on these lines. I have tried several, but have not been very successful. In September 1924, out of about a dozen grafts of different varieties, only one took. This was a Kent's on to a Robusta stock ; and it is now 4 feet high with a fair crop on the primaries, but like the Hybrids it is disinclined to flush. It is not proof against leaf disease but it is certainly very resistant. Grafting was tried in April also but without any success. It was noticed at the time that the sap from the stock flowed very freely, and probably the Spring sap is too copious for grafting to be successful at that time of the year.

PESTS

Green bug is worse this year than last, probably owing to the absence of continuous wet and misty weather ; and many of us are busy spraying with Fish Oil Soap. Our little friends, the black ' Lady-birds ' are conspicuous by their absence ; while last year they were plentiful. Blue mould has however started and ought to spread now. Most estates are fairly free from leaf disease so far, but on some places, although they are liberally worked estates, it is pretty bad and the leaves are already on the ground. It is very curious that the disease should start earlier on some Estates one year ; while it may be almost absent on that property the year following. Two estates are making vigorous efforts to spray their whole area with Bordeaux, and certainly the weather continues to be favourable for this work. So far, we up here have not been able to find anything to beat the 2 gallon Holder Sprayer, but there must be some machine which is more suitable for spraying large areas. The chief defects in a Knapsack Sprayer are the necessity of constant repumping, and the fact that spares are seldom

available in this country. Of course there is the 'Four Oaks' battery; and for large areas it seems probable that we shall get on to that type in time, but one is inclined to fight shy of a machine that may need supervision by a Mechanic. The 'Auto' Sprayer is also being used on these Hills now, but this also requires constant repumping and the innumerable washers and screws that most types possess are a great disadvantage, when one has to leave them to inexperienced coolies to handle. **It would be very helpful to their brother Planters if your District Correspondents would discuss this subject in their Notes;** and let them have the benefit of the experience gained in other Districts. At present the Pioneers of Spraying on these Hills would appear to be spending a good deal of money on trying different types which may eventually have to be scrapped for something more suitable.

ROADS

The Union Board are certainly doing their best with the funds at their disposal in getting the roads within the town into order. A small section near the Lake, which after rain was always ankle deep in thick sticky clay, has been metalled; and steps are being taken to re-shape and gravel a very bad portion round the Post Office, Library and Church. As regards the roads which are not under the control of the Union Board, or more strictly speaking, those known as 'Imperial,' well, the more said the soonest mended I should think, for there is a great deal one could say against the present methods. There have been two instances where the Contracts were not given out in time for the work to be continued from the end of one official year into the beginning of the next; and eventually, when the contracts were given out, the allotments made for upkeep were three-quarters of the usual annual amount on the ground that only nine months' work could be put into the roads! It does not seem to occur to the mechanical mind of an Engineer (while it is obvious to the mind of an ordinary Planter) that if a road has been neglected for three months it will cost much more to put it into order than if it had not been allowed to fall into disrepair. This is presumably 'Economy,' and perhaps Government commends the bright mind which conceived the idea. The roads on these Hills are in such an appalling state that the S.P.A. have decided to take up the contracts and apportion them amongst its Members. As was sung at one of the 'Shows' here, an admirable verse, by our local Laureate, to the tune of 'Show me the way to go Home':—

Some one came from Ranipet in a Motor Car,
When he got up to Yercaud he had travelled far,
As he bumped across the stones, we call roads up here,
Quickly he turned off the switch, shouting out in fear.

'I had a little bump' was substituted for 'I had a little drink' etc. in the Chorus.

WEATHER

There is little more to be said on this subject. From March to June the heat has been greater than can be remembered for many a year. At present it is very pleasant, with fine days most of the time and occasional showers in the evenings, and most of us have little to say about it, except the usual Farmer's grouse. If it is misty or cloudy for a day, we feel it a grievance because it does not pour; or if there is a good fall in the evening after a fine warm day, it is bad for leaf disease. Now it looks as if we are in for a real wet spell, so I suppose the Estate Spraying will have a grouse, but please don't whisper the news of the coming rain too loud, or we shall have the Meteorological Reporters forecasting occasional showers in the central parts of the Peninsula.

YERCAUD, July 31, 1926.

E. H. A. TRAVERS DRAPES.

DISTRICT ASSOCIATION MEETINGS

A. WYNAAD PLANTERS' ASSOCIATION
(INCORPORATED)

Proceedings of an Ordinary General Meeting held at
Meppadi Club at 2-15 p. m. on Wednesday, August 4, 1926

Present

Mr. B. M. Behr (*Chairman*), Messrs. A. R. H. Angus, G. Q. Archard, J. E. Bisset, B. St. J. Boulton, W. G. Craig, E. E. Eyre, T. P. Gauld, H. J. C. Hammond, L. C. G. Hayne, E. Janzen, R. A. Leslie, M. W. Mackay, E. R. Peachy, S. H. Powell and I. W. Finlayson (*Honorary Secretary*).

The notice calling the meeting was read.

(1) The minutes of the last meeting, after the Honorary Secretary had pointed out the alteration to Item 13, were taken as read and confirmed.

(2) *U.P.A.S.I. Annual General Meeting, 1926.*

Instrutions to Delegates.—The Chairman went through the Agenda, and explained each item; and elicited the opinion of the meeting on matters concerning the Association.

(3) *Scientific Department.*—The Chairman explained the Executive Committee's scheme for reorganizing the Scientific Department. The meeting was generally in favour of the scheme.

(4) *Unemployment Committees.*—The Chairman read a letter from the Labour Commissioner enclosing a questionnaire on the subject of unemployment among the middle classes of the Presidency. It was resolved after discussion, to appoint a committee composed of the Chairman, with Messrs. Bisset and Powell to draw up a reply.

(5) *Visit of the Scientific Officers.*—Proposed by Mr. Bisset and seconded by Mr. Eyre, 'That the Honorary Secretary be instructed to write to the Executive Committee with reference to the cancellation of the tour of the Scientific officers which had been arranged for the early part of June.'

(6) *Labour.*—The Chairman referred to the recent correspondence in the Press regarding Labour conditions in the district. It was agreed to ask the Executive Committee, U.P.A.S.I., to request Government to send the Commissioner of Labour to visit the District to report on the general labour conditions.

District Labour Rules.—Read a letter from the Honorary Secretary, N.W.P.A., stating that his Association was not in favour of accepting our rules.

Coimbatore Control Labour Meeting.—Mr. Gauld gave a report of the proceedings of the meeting held at Coimbatore on July 28 and 29 and drew the special attention of the meeting to the necessity of keeping the Labour Department in funds for despatch of coolies.

(7) *Roads.*—The Honorary Secretary was instructed to write to the N.W.P.A. and ask them to press for the repair of the Nilgiri section of the Nellacotta-Sultan's Battery Road. He was also instructed to write to the Malabar District Board Engineer for information regarding the progress of work on the Nadughani Ghaut Road.

(8) *Correspondence.*—(a) Read a letter from the Secretary, U.P.A.S.I., regarding the Roll of Honour. The meeting was in favour of the Executive Committee's original proposal that this should be erected in the U.P.A.S.I. Office, Madras.

(b) Read letter from the Secretary, U.P.A.S.I., regarding the courses at Tocklai.

(c) Read letter from Dr. Govindan Nair thanking the Association for the cheque sent to him as a mark of appreciation of his services during the outbreaks of Plague.

The Chairman thanked all present for the splendid way they had turned out to the meeting in such bad weather.

The meeting then closed with a vote of thanks to the Chair.

I. W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

B. NELLIAMPATHY PLANTERS' ASSOCIATION

Proceedings of an Extraordinary General Meeting held at the Seetagundy Bungalow on August 1, 1926, 2.30 p.m.

Present

Messrs. A. Hall, H. A. Boas and A. P. Kinloch (*Honorary Secretary*); and, by proxy, Messrs. H. D. Chaldecott (*Chairman*), H. M. Hall and A. C. White.

Visitor

Mr. V. C. Dupen.

The Honorary Secretary read the notice calling the meeting.

1. The minutes of the last meeting held at Seetagundy Bungalow on June 13, 1926, were taken as read and confirmed.

2. The instructions regarding the agenda of the Annual Meeting of the U.P.A.S.I. to be held at Bangalore this month were conveyed to Mr. A. P. Kinloch, the delegate.

Proposed a hearty vote of thanks to Mr. Kinloch for the use of his bungalow.

(Sd.) A. P. KINLOCH,
Honorary Secretary.

(Sd.) H. D. CHALDECOTT,
Chairman.

LETTERS TO THE EDITOR

(*The Planters' Chronicle is not responsible for its Correspondents' Views.*)

A. Hydrometeorological Verse

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

The following lines appeared in the *London Opinion* of July 10, 1926.

VARIATION

The rain is raining all around,
It rains on all the nations,
It rains a lot on many things,
But mostly on vacations.

'Brown owl.'

In view of the fact that this has been the driest season in living memory in the Katary and Kullakamby Districts, I suggest the following parody:—

ANOTHER VARIATION

The rain is raining all around,
It rains on all the stations,
It rains on every barren rock,
But *not* on Tea Plantations!!

SHOLAROCK ESTATE,
KATARY P. O.,
July 26, 1926,

Yours, etc.,
PHIL. BEAVER,

B. Past Secretaries of the Wynaad, Planters' Association

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

SIR,

I have read with great interest Mr. Waddington's letter in your issue of July 31 and am grateful to him for pointing out the inaccuracies in my list.

The reason for most of the discrepancies is however the fact that when Mr. Waddington was Honorary Secretary of this Association many records of the Association appear to have been extant, which seem to have gone astray since. The list compiled by me was taken from an old Cash Book, the only record of any antiquity I possess, and in several of the years there was no mention of the Honorary Secretary's name and I had only the handwriting to go by. Had I known Mr. Waddington was in possession of much fuller details I should have applied to him in the first instance.

As regards his last correction there seems to have been a clerical error in my list and Mr. Behr's name should have been bracketed with Mr. Hay's for the year 1922-23 instead of with Mr. Gwynne's for the year 1921.

I should be very interested to know by the way if Wynaad can claim to be the senior District Association in South India, dating back as it does to 1857.

KARDOORA ESTATE,

MEPPADI.

August 3, 1926.

Yours, etc.,

IAN. W. FINLAYSON,

Honorary Secretary, W. P. A.

C. Past Secretaries of the Wynaad Planters' Association.

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

SIR,

With reference to Mr. Finlayson's letter of the 3rd instant, which you have handed me for comment, I have to advise you that I have no doubt that the Wynaad Association was the first Planters' Association established in Southern India, notwithstanding the fact that records at the Secretary's Office do not go further back than 1873. Although at the time I was Secretary I knew the Association must have started some time prior to the oldest records, it was not till some ten years later that the Book of Proceedings for 1860-1861 came into my hands. From the Rules printed as an appendix to this Book it is evident that the Association was first started, as stated in my previous letter, on March 2, 1857. It was then called the Western India Planters' Association, and held meetings at Manantoddy, Vayitri and Kalpetta, but it has to be definitely proved that it had a continuous existence from that date and that the title 'Wynaad Planters' Association' is simply a mutation in name and does not denote a different Association. From time to time evidence comes to light to support the view that it has had a continuous existence. The Rules and Book of Proceedings of 1861 show that

it was working from 1857 to 1861. Reference to Sir William Denison's book proves that it was working in 1863 and that he visited and met planters at Manantoddy and Vayitri in September and October 1864. The experiences of an old Wynaad Planter published in the *Journal of Horticulture* in 1886, mentions that it was at the instance of the Wynaad Planters' Association that the Government of Madras in 1866 deputed Dr. Bidie to investigate Leaf Disease. There is still a gap of seven years between 1866 and 1873 to be filled, but of the members given in a list in the Book of Proceeding in 1861, thirteen were still members according to the List of Members in the records of 1873.

MADRAS,
August 10, 1926.

Yours, etc.,
H. WADDINGTON.

D. U. P. A. S. I. Sports Club. Venue of Meet for 1927

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

Mr. Behr is quite right. His letter of the 21st ulto certainly does appear as if he was against any change.

As I think Upasi Sports Club members should have an opportunity of hearing the other side, I would point out that Mr. Behr in giving 'some idea of what a change of Venue would involve' enumerates twelve different duties which the casual reader of his letter might naturally conclude would have to be done only in the event of a change of venue, whereas those same duties will have to be performed whether the Meet takes place in Ooty, Coonoor or anywhere else.

Mr. Behr gives the impression that our Secretary is not prepared to take on the work if the Meet is held at Coonoor but will do so if held at Ooty. I think there must be a misunderstanding here as from correspondence I have, I have a different impression.

I do not think Mr. Behr is quite right in saying an 'Entertainment Committee would have to be replaced' as I think I am correct in saying there is no Entertainment Committee to replace. I understand the gentleman who was appointed at our last General Meeting as Meet Secretary now finds he is unable to do the work.

It appears to me that if the same amount of money was spent on the cricket pitch at Wellington as is spent on the one in Ooty, it might be made equally good but this I admit is open to question. It is not however, I understand, open to question that the golf course at Wellington (which is not mentioned by Mr. Behr) is better than the Ooty course at the time of year we hold our Meet.

The above criticisms of Mr. Behr's letter are made with the sole object of putting the other point of view before the Sports Club members and I am sure Mr. Behr will take them in the same spirit in which they are made.

Yours, etc.,
STUART HAWKINS.

August 3, 1926.

RUGBY FOOTBALL

ALL INDIA TOURNAMENT, 1926

1. The Cup is to be played for annually at Madras, Bombay and Calcutta in turn and may be competed for by any team from India, Burma and Ceylon.

2. The Cup cannot be won outright but is to be held by the winning team for one year. It must be returned by this year's winners to the Honorary Secretary, Bombay Gymkhana Club, a fortnight before the All India Tournament commences in 1927.

3. The Tournament will be played under the rules of the Rugby Football Union in force on January 1, 1926, and will be played on the 'knock out' system. Time; 25 minutes each way will be played, if no decision at 'no side' another 10 minutes extra each way if possible.

4. Entrance Fee for each team Rs. 20.

5. The Tournament will commence on Monday, October 4 and the final be played on Saturday the 9th. If absolutely necessary teams may be called upon to play on the 2nd or 3rd October.

6. All entries accompanied by the entrance fee must reach the Honorary Secretary not later than September 11 after which date no entries will be received.

MADRAS GYMKHANA CHALLENGE CUP

WINNERS OF THE ALL INDIA CUP, 1926, WILL ALSO BE CONSIDERED HOLDERS OF THE MADRAS GYMKHANA CUP.

THE CUP SHOULD BE RETURNED TO THE HONORARY SECRETARY, MADRAS GYMKHANA CLUB, BY SEPTEMBER 1, 1927

Previous Winners

1900	}	2nd Welsh Regiment.	1910	}	Madras Gymkhana Club.		
1901			1911				
1902			1912				
1903	}	Madras Gymkhana Club.	1913	}	United Services.		
1904			1919		Cadet College, Wellington.		
1905	}	Madras Brigade.	1920	}	Ceylon Rugby Union.		
1906			1921				
1907	}	1st West Riding Regiment.	1922	}	Madras Gymkhana Club.		
1908			1923				
1909	}	2nd Leicestershire Regiment.	1924 No Tournament.				
			1925 Ceylon Rugby Union.				

Mr. R. B. Carrick informs us that the following 9 teams have already intimated their intention of entering teams; The Madras and Bangalore Gymkhana Clubs; the U. P. A. S. I.; the Lancashire Fusiliers the Welsh Regiment and the Prince of Wales's Volunteers; and Calcutta, Bombay and Ceylon. Every one will regret to learn that the 'Navy' finds itself unable to compete this year, as it had hoped to do.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending August 7, 1926
Bank Selling Demand Draft on London

2nd	3rd	4th	5th	6th	7th
17 7/8d.	17 7/8d.	17 29/32d.	17 29/32d.	17 29/32d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending July 17, 1926	January 1 to July 17, 1926	January 1 to July 17, 1925
(A) TEA (WEEK ENDING JULY 17, 1926)				s. d.	s. d.	s. d.
(a) Anamalais—			N. India.	1 5.47	1 8.67	1 5.33
Nullamudi ... 195			S. India	**1 5.24	††1 8.76	††1 6.52
Mukkottumudi ... 292			Ceylon...	1 5.85	1 9.30	1 7.90
Thayamudi ... 230			Java ...	1 2.37	1 4.97	1 0.93
Kallyar ... 201			Sumatra.	1 2.72	1 6.58	1 4.46
(b) Central Travancore.			Nyassa-land.	1 4.97	1 6.07	1 1.61
Caradigoody ... 100			Total ...	*1 5.21	†1 8.49	‡1 5.81
Ladrum ... 53			(B) COFFEE			
Stagbrook ... 118			London Prices (seven days ending July 20, 1926)			
Glenmary ... 227			Messrs. T. H. Allan & Co. under date London, July 21, say that no East Indian Coffee was offered publicly, but a few lots sold privately at very good prices.			
(c) Kanan Devans—			(C) RUBBER			
Gundumally ... 31			The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, August 10, 1926, was 19½d.			
Kalaar ... 290						
Nallatanni ... 163						
Letchmi ... 159						
(d) Niligiris—						
Prospect ... 126						
Nonsuch ... 124						
Craigmore ... 60						
(e) Niligiri-Wynaad—						
Seaforth ... 97						
(f) South Travancore—						
Poonmudi ... 102						

** Based on 4,303 packages.

†† " " 97,540 "

†† " " 96,656 "

* Based on 50,743 packages.

† " " 1,789,031 "

† " " 1,591,244 "

(b) *Précis of Reports on the London Market received on Monday, August 9, and covering the seven days ending Tuesday, July 20 :—*

(1) *Tea.*—The South Indian average, as compared with that of the previous week, was down by 0·26*d.*; owing to the fact that, though good liquoring teas remained steady, the common types showed a decline of from $\frac{1}{4}$ *d.* to $\frac{1}{2}$ *d.* per pound. As indicated on the previous page, prices were below the level of last year; but doubtless the set back is only temporary since bonded stocks in the United Kingdom are over 23,000,000 lbs. lower than they were this time last year. It is encouraging also to note that Home consumption during the first half of the present year was 205 million pounds as against 194 $\frac{1}{4}$ million pounds in the first half of 1925.

(2) *Rubber.*—During the seven days under review stocks rose by 669 tons to 26,732 tons; the 'spot' price remaining at about the 1/8 $\frac{1}{2}$ *d.* mark. Most of the American tyre manufacturers are following the example of the Good Year Tyre Company which has reduced its prices by from 8 per cent to 20 per cent; and this should give an impetus to business since for several months past the American public has been most loath to buy tyres at the prices which the manufacturers were trying to obtain. Now that they have decided to cut their losses and sell tyres at a price commensurate with the present cost of the raw material, the trade will doubtless speedily revive.

(3) *Coffee.*—The East Indian coffee sold privately fetched good prices and Home opinion seems to be that there will be no falling off within the next few months. The London stocks point to the same conclusion; since on July 20 they stood at 26,351; 14,487; and 99,001; for respectively African, Indian, and 'Other Kinds'; as against 24,350; 43,471; and 129,610 on the corresponding date in 1925.

III. Weekly Rainfall Statement

From Sunday, August 1, 1926, to Saturday, August 7, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	1·88	44·16	46·04	19. Naduvattam	11·08	N.R.	N.R.
2. Kalthuritty.	9·46	64·53	73·99	20. Coonoor ...	1·57	9·63	11·20
3. Tenmalai ...	11·34	72·65	83·99	21. Kotagiri ...	1·15	20·51	21·66
4. Mundakayam.	18·17	73·74	91·91	22. Ootacamund	2·67	25·74	28·41
5. Peermade ...	26·87	99·48	126·35	23. Yercaud ...	1·66	22·32	23·98
6. Twyford ...	29·64	109·09	138·73	24. Devala ...	N.R.	86·01	N.R.
7. V'periyar ...	16·07	43·00	59·07	25. Gudalur ...	8·46	48·21	56·67
8. Kalaar ...	42·31	94·06	136·37	26. CALICUT ...	14·42	77·61	92·03
9. Chittuvurrai	4·82	19·18	24·00	27. Kuttiyadi ...	17·90	94·09	111·99
10. BODI'KANUR	0·28	5·14	5·42	28. Vayittiri ...	21·44	118·05	139·49
11. COCHIN	5·22	73·83	79·05	29. Manantoddi.	17·55	61·19	78·74
12. Mooply Valley.	11·77	82·20	93·97	30. Billigiris ...	6·48	18·77	25·25
13. Pachaimalai.	23·60	62·10	85·70	31. Sidapur ...	11·63	43·17	54·80
14. Mudis ...	43·91	120·02	163·93	32. Pollibetta ...	15·65	57·56	73·21
15. Nell'pathy...	17·95	47·82	65·77	33. Somwarpett.	17·34	30·55	47·89
16. POLLACHIE.	7·02	10·85	17·87	34. Ballupete ...	N.R.	31·52	N.R.
17. Manjeri ...	17·47	76·92	94·39	35. MANGALORE	11·14	67·16	78·30
18. Nilambur ...	15·97	70·37	86·34	36. MADRAS ...	0·72	3·30	4·02

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 35] SAT., AUGUST 28, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	573	The Control of Rubber Disease	587
U.P.A.S.I. 33rd Annual General Meeting—Resolutions ...	575	Exports of Fertilizers and Oil-seeds ...	589
District Assoc. Meetings—		Exports of Rice ...	590
A. Mundakayam ...	583	Commercial and Meteorological ...	591
B. West Coast ...	584		
C. South Travancore ...	585		

EDITORIAL NOTES

The Resolutions passed at the Thirty-third Annual General Meeting of the U.P.A.S.I. are published in the following pages; and Readers are reminded that the verbatim reports of the speeches made at the Meeting will, as usual, be published in *The Book of Proceedings* for which orders should now be placed with the Secretary, U.P.A.S.I. The cost is Rs. 2-8-0 post free.

Messrs. Leslie and Anderson in a report dated London, July 8, state that the Cardamom market was very dull during the month, and that only 483 cases were delivered against Landings of 996. The same report gives the following statistics for the first half-years in 1926 and in the preceding four years:—

	1926	1925	1924	1923	1922
Landed during January-June (inclusive.)					
cases ...	2,555	1,460	2,678	1,527	1,672
Delivery „ „ „ „ ...	1,550	1,032	1,559	2,019	2,845
Stock end of June „ „ „ „ ...	1,573	1,038	1,573	1,319	2,729

Messrs. G. Duuring and Zoon publish the following estimate (in bags) of the present Coffee Stocks:—

	1926	1925	1924	1923	1922
European Stocks—1st July.....	1,574,000	1,688,000	1,693,000	1,871,000	2,612,000
„ „ 1st June.....	1,609,000	1,793,000	1,783,000	2,018,000	2,596,000
„ Deliveries in six months.....	4,948,000	4,717,000	5,031,000	4,272,000	4,265,000
U.S.A. Stocks—1st July.....	647,000	713,000	760,000	862,000	1,117,000
„ „ 1st June.....	588,000	536,000	668,000	825,000	1,149,000
„ Deliveries in six months.....	5,450,000	4,155,000	5,273,000	5,171,000	4,925,000
Visible Supply—1st July.....	*4,571,000	*5,085,000	*5,071,000	*5,340,000	8,639,000
„ 1st June.....	*4,449,000	*5,228,000	*4,754,000	*5,487,000	8,902,000
* Not included Interior Sao Paulo stocks:—					
1926		1925		1924	
1st June.....	3,144,000	1st June.	2,403,000	1st July.	4,592,000
		1st July.	1,786,000		

Mr. C. R. T. Congreve has very kindly forwarded to us through the *Anamalai P. A.* the following very interesting Historical resumé of the *A. P. A.* :—

The Anamalai Planters' Association was inaugurated at the suggestion of Mr. G. L. Duncan, at that time Manager of the Valparai Estate, and the first meeting was held at the old Bungalow on the Valparai Rock, with Mr. Duncan in the Chair. Every planter then in the district attended, and Mr. G. A. Marsh was elected Honorary Secretary.

This was either in 1902 or 1903, as the third Annual Meeting was held in November 1906. Mr. Marsh was Honorary Secretary from the start of the Association to the beginning of 1906, when Mr. Congreve took over, at a meeting presided over by Mr. Duncan. Up to 1910 Chairman for the year was not elected, but at each meeting, a Chairman for the meeting was elected, and the following gentlemen presided at various meetings during these years. Messrs. G. Duncan, O. A. Bannatine, E. G. Windle, E. W. Simcock, G. A. Marsh, C. H. Brock.

<i>Year</i>	<i>Chairman</i>	<i>Honorary Secretary</i>
1906-7	Third Annual Meeting.	G. A. Marsh and C. R. T. Congreve.
1907-8		G. Duncan.
1908-9		C. R. T. Congreve.
1909-10		C. H. Brock.
1910-11	G. Duncan. <i>Vice</i> , C. H. Brock.	G. Duncan, acted.
1911-12	C. H. Brock „ G. A. Marsh.	C. R. T. Congreve.
1912-13	G. A. Marsh „ G. Duncan.	J. H. Robinson.
1913-14	G. Duncan „ B. Marden.	J. H. Robinson.
1914-15	C. R. T. Congreve, J. H. Robinson.	J. E. Scott.
1915-16	C. R. T. Congreve, J. H. Robinson.	A. C. Cotton.
1916-17	J. H. Robinson, B. M. Behr.	A. Robb.
1917-18	J. H. Robinson, G. A. Marsh.	A. Robb, C. R. T. Congreve.
1918-19	J. E. Scott.	C. R. T. Congreve.
1919-20	J. E. Scott, J. H. Robinson.	C. R. T. Congreve, J. E. Sampson.
1920-21	C. R. T. Congreve.	J. E. Sampson.
1921-22	J. H. Robinson.	J. E. Sampson, D. Cooper.
1922-23	J. H. Robinson.	D. Cooper.
1923-24	A. C. Cotton.	D. Cooper, J. A. R. Lloyd.
1924-25	A. C. Cotton, F. Simmons.	J. A. R. Lloyd, J. E. Sampson.
1925-26	F. Simmons, J. E. Sampson.	J. E. Sampson, D. Cooper and G. W. Wallace.
1926-27	J. E. Sampson.	G. W. Wallace, W. H. Martin.

In 1918 some mistakes seems to have been made in the number of the annual meeting, which was put down as the twelfth, whereas it ought to have been the fourteenth, with the result that the last Annual Meeting instead of being called the Twenty-third Annual Meeting, has been called the Twenty-first. This it seems to me should be altered.

*Executive
Committee*

As we go to Press we learn that the following gentlemen were elected as members of the Executive Committee for 1926-27 :—

	<i>Active Member</i>	<i>Member-in-waiting</i>
For TEA	... Mr. A. C. Cotton.	Mr. H. L. Pinches.
For COFFEE	... „ C. Lake.	„ P. G. Tipping.
For RUBBER	... „ H. J. Walmesley.	„ C. L. McLean.

RESOLUTIONS
MOVED AT THE
THIRTY-THIRD ANNUAL GENERAL MEETING
OF THE
U. P. A. S. I.

FIRST DAY—MONDAY, AUGUST 23, 1926

1. Proposed from the Chair :

That the Executive Committee's Report be and is hereby adopted.

Carried.

2. Proposed by Mr. C. L. McLean and seconded by Mr. H. R. Carson Parker :

That last year's surplus on the Mycologist Station be carried forward to the current year.

Carried.

3. Proposed from the Chair :

That the Accounts be adopted.

Carried.

4. Proposed from the Chair :

That a Sub-Committee consisting of Messrs. Congreve, Tailyour, Tipping and Langley, be appointed to consider the matter of the establishment of a Road Fund in India and be asked to report to this Meeting not later than Thursday morning.

Carried.

SECOND DAY—TUESDAY, AUGUST 24, 1926

5. Proposed by Mr. J. S. Hawkins and seconded by Mr. J. Aird :

That the Association subscribe to the L.A.N.I. and S.I.N.A. on behalf of its European Employees.

Carried.

6. Proposed from the Chair :

That the new Rule of the U.P.A.S.I., accepted by the General Committee reading as follows be confirmed :—

X. The Trustee of the Cochin Port Trust representing the Association shall always, if possible, be a planter and shall be elected by the postal vote of the active members of the Executive Committee.

Carried.

7. Proposed from the Chair :

That Rule VI of the U.P.A.S.I. Rules be amended as follows :—

VI. No subject other than those on the published Agenda shall be discussed except with the consent of the meeting. No original proposition

shall be made unless thirty days' notice in the case of an Ordinary Meeting and fourteen days' notice in the case of a General Committee Meeting stating objects and reasons has been given to the Secretary ; except with the consent of the Executive Committee with which a copy of the proposed resolution has been lodged at least two days before the meeting.

Carried.

8. Proposed from the Chair :

That the Report of the Director of the Labour Department be adopted.

Carried.

9. Proposed from the Chair :

That the rescinding of Rule II and amendment of Rule III as passed by the Executive Committee at a meeting held on November 19, 1925, and by the General Committee at a meeting held on February 23, 1926, be hereby confirmed.

Carried.

10. Proposed by Mr. A. J. Wright and seconded by Mr. R. J. McMullin :

That the Executive Committee be requested to pass a Rule imposing a penalty in the event of an appeal which they consider to be frivolous being made to them under Rule III.

Carried.

11. Proposed by Mr. A. Hall and seconded by Mr. J. E. Sampson :

That to the Definition of Planting Districts under Rule XIV, there shall be added.

Nelliampathies Bounded by—

West—Long. 76° 35' E.

South—Cochin Forest Tramway from 76° 35' E. to Kuriarmooty.

East—Kuriarmooty along the Tekkadi River to Tekkadi and thence due North to the Nelliampathy foot-hills.

North—Nelliampathy foot-hills.

Carried.

12. Proposed from the Chair :

That the additional Rule XIV of the Labour Department Rules passed by the General Committee at a meeting held on August 21, 1925, and the amendment to Rule VII (ii) passed and brought into force provisionally by the Executive Committee at a meeting held on May 20, 1926, and passed by the General Committee (on August 23, 1926) be hereby confirmed.

Carried.

13. Proposed by Mr. B. P. Tailyour and seconded by Mr. A.J. Wright:

That a book of standing instructions be drawn up and printed for use in the Labour Department, and that copies be circulated to all subscribers. This book should be in two separate sections as follows :—

(1) U.P.A.S.I. Rules, Departmental Rules and Inter-District Rules.

(2) Procedure between (a) Labour Department Superintendent and his Agent, (b) Labour Superintendent and Estates.

Carried.

14. Proposed by Mr. B. M. Behr and seconded by Mr. J. Aird :

That European Employees of the Labour Department should not be granted Furlough between February and the end of May unless it is necessitated by reasons of health or other special reasons.

Lost.

15. Proposed from the Chair :

That the Association consider what steps should be taken through the Labour Department or otherwise to controvert the unsubstantiated statements regarding the conditions on estates which have recently been given prominence in certain sections of the daily press.

Carried.

16. Proposed by Mr. B. M. Behr and seconded by Mr. A. C. Cotton :

That the Commissioner of Labour be invited to enquire into the conditions of labour on the Tea, Coffee and Rubber Estates.

Carried.

THIRD DAY—WEDNESDAY, AUGUST 25, 1926

17. Proposed by the Chair :

That the Rules of employment, allowances, leave and scale of pay for the European Staff of the Labour Department as revised and sanctioned by the Executive Committee on May 21, 1926, be confirmed.

Carried.

18. Proposed from the Chair :

That the Rules and Regulations of the United Planters' Association of Southern India European Employees' Provident Fund (as amended) as approved by the General Committee of the Association in meeting on August 23, 1926, are hereby confirmed.

Carried.

19. Proposed by Mr. J. E. Sampson and seconded by Mr. B. M. Behr :

That an Indian Employees' Provident Fund be introduced as from April 1, 1927 ; and that contribution to the Fund shall be optional to all Indian Employees in the service of the U.P.A.S.I., on that date, and compulsory for all engaged thereafter.

Carried.

20. Proposed by Mr. B. M. Behr and seconded by Mr. J. E. Sampson :

That the Rules and Regulations of the U. P. A. S. I. Indian Employees' Provident Fund as drawn up by the Director of the Labour Department and circulated to all members of Control Committees be adopted subject to the resolution just passed and to the opinion of the Association Solicitors.

Carried.

21. Proposed by Mr. P. G. Tipping and seconded by Capt. E. H. A. Travers Drapes :

That this meeting consider the advisability and practicability of combination of members of the Association for the systematic reduction of advances to Labour, and that the matter be referred to all District Associations for opinion.

Carried.

22. Proposed by Mr. J. S. Hawkins and seconded by Mr. J. S. Nicolls :

The question of the Venue of 'Planters' Week' in 1927 be decided by the members of the Upasi Sports Club.

Lost.

23. Proposed by Mr. J. E. Sampson and seconded by Mr. I. W. Finlayson :

That the 'Planters' Week' for 1927 be held in Ootacamund in the second half of February.

Carried.

24. Proposed by Mr. J. S. Nicolls and seconded by Mr. R. J. McMullin:

That the accounts of the U.P.A.S.I. Sports Fund as placed before the meeting be adopted.

Carried.

25. Proposed by Mr. C. L. McLean and seconded by Mr. H. Walmesley:

That this Association withdraws from the arrangement made in 1924 with the Madras Chamber of Commerce, the Madras Trades Association and the European Association for a salaried political representative.

Withdrawn.

26. Proposed by Mr. A. C. Cotton and seconded by Mr. I. W. Finlayson :

That this Association request the Government of Madras to reconsider their refusal to alter the Anamalai leases in order to make them renewable after the period of sixty years for which they are now current.

Carried.

27. Proposed by Mr. J. Aird and seconded by Mr. B. M. Behr :

That Government be asked to postpone the collection of the amounts now claimed on account of the Wynaad Re-settlement Survey Charges

until further consideration has been given to the matter and the estates allowed an opportunity of meeting the officer in charge of The Survey Party and placing their case before him as proposed by the Director of Surveys.

Carried.

28. Proposed by Mr. A. Hall and seconded by Mr. J. E. Sampson :

That this Association re-approach the Cochin Durbar with a view to fixing a more equitable rent than the Rs. 5 per acre on cultivated land to be leased for Planting purposes lately notified in the Cochin Government Gazette.

Carried.

29. Proposed by Mr. C. Lake and seconded by Mr. S. P. St. C. Raymond :

Resolved to ask the coffee curing and shipping agents at Mangalore and Tellicherry to set up a small Committee with representatives of the Association to take up with the D.I.G. of Police arrangements for the prevention of robbery of goods consigned through cartmen to estates in planting districts.

Carried.

30. Proposed from the Chair :

That the representatives of the U.P.A.S.I. on the Committee be Messrs. Lake and Raymond.

Carried.

31. Proposed by Mr. W. K. M. Langley and seconded by Mr. A. J. Wright :

That the U. P. A. S. I. do co-operate with Chambers of Commerce on the West Coast and at Tuticorin in urging upon the Government of Madras the necessity for the introduction at the earliest possible moment of the Madras Pilferage Prevention Act, 1924 and its extension when passed to the ports of Tuticorin, Cochin, Calicut and Tellicherry.

Carried.

32. Proposed by Mr. A. C. Cotton and seconded by Mr. B. M. Behr :

That the proposals for the future working of the Tea Scientific Department as set out in letter before the meeting, dated July 3, from the Association to members be adopted.

Carried.

33. Proposed by Mr. J. E. Sampson and seconded by Mr. B. M. Behr :

That this Association ask the I.T.A. to permit an annual visit and report by Mr. Carpenter on the U.P.A.S.I. Tea Scientific Department.

Carried.

34. Proposed by Mr. A. C. Cotton and seconded by Mr. A. J. Wright :

That the thanks of the U. P. A. S. I. be accorded to Mr. R. M. Nicolls for the work he has done for the Tea Scientific Department, and

that a sum of Rs. 500 be voted from the Tea Scientific Department. Funds for the purpose of presenting him with a piece of plate.

Carried.

35. Proposed by Mr. H. J. Walmesley and seconded by Mr. F. G. Millar :

That the proposals for the future working of the Rubber Scientific Department as set out in letter before the meeting, dated July 3, from the Association to members be adopted.

Carried.

36. Proposed by Mr. C. Lake and seconded by Mr. P. G. Tipping :

That no action be taken in the matter of scientific aid for Coffee until the proposals of this Association, to have a fully qualified Resident Manager on the Station have been put before the Mysore Durbar and its policy for the future management and working of the Mysore Coffee Experimental Station has been ascertained.

Carried.

37. Proposed by Mr. M. A. DeWeck and seconded by Mr. P. G. Tipping :

This Association invites the attention of the District Board, South Kanara, to the very bad state of the Kodaikal Ghat Road No. 4, commonly called the Boond Ghat Road, mile 15½ to the Mysore Boundary, and request that immediate steps be taken to ensure that this road which is the most important means of communication between Mysore and South Kanara, is put into ' good ' repair as soon as possible.

Carried.

38. Proposed by Mr. A. Hall and seconded by Capt. E. H. A. Travers Drapes :

That this Association do approach the Dewan of Cochin with a view to the improvement of the Meenjadi-Sherenelly Section of the Nelliampathie Ghat Road.

Carried.

39. Proposed by Mr. J. E. Sampson and seconded by Mr. J. Aird :

That the Roll of Honour of those Planters who died as a result of the Great War be inscribed in St. Stephen's Church, Ootacamund, and that a copy of the Roll of Honour together with a list of those planters who served on any Front be placed in the Office of the U.P.A.S.I., Madras.

Carried.

40. Proposed by Mr. C. R. T. Congreve and seconded by Capt. E. G. Windle :

That the question of the form and list of the Roll of Honour be left to the Ex-Committee with a request that it be as simple as possible.

Carried.

41. Proposed by Mr. P. G. Tipping and seconded by Mr. C. Lake :

That the Association address the Government of India through the Government of Madras urging that the import into India of Coffee except in the form of roasted and ground be prohibited with as little delay as possible.

Carried.

FOURTH DAY—THURSDAY, AUGUST 26, 1926

42. Proposed by Mr. A. J. Wright and seconded by Mr. A. K. Weld Downing :

That this Association recommend to the Government of India through the Government of Madras that such steps as are necessary be taken to establish a Road Fund in India on the lines of the Road Fund now in force in Great Britain and put forward the following recommendations for the consideration of the Government of India.

(1) That a Road Fund for India be established.

(2) That the Road Fund should be collected and administered provincially with suitable provision for liaison between the various Provincial Government and the Native States.

(3) That a Road Board should be formed for each province and that this Board should be the sole body authorized to administer the Road Fund.

(4) That a Representative of the Planting Community should be appointed on the Road Boards.

(5) That the system of collecting tolls should be continued for all vehicles other than those driven mechanically.

(6) That tolls should be abolished in the case of Motor and other mechanically driven vehicles : and that such vehicles should be taxed on the Horse Power in the case of Motor Cars and on the weight in the case of commercial vehicles : and that the whole of such taxes should be handed over to the Road Board to be administered by that body.

(7) That as there is no Motor Industry in India which requires protection and that as the free development of Motor Transport is essential to the prosperity of the country, the present Import Tax on Motor Cars should be reduced to 10 per cent and that the Import Tax on commercial vehicles be abolished.

(8) That the Road Board should be authorized to raise loans for the construction of new roads and for the improvement of existing roads, such loans to be secured on the taxes raised for the Road Fund.

(9) That special attention should be paid by the Road Board to the development of roads for the cheapening and improvement of transport of agricultural produce.

Carried.

43. Proposed by Mr. B. M. Behr and seconded by Mr. J. E. Sampson :

That if necessary the U.P.A.S.I. undertake to make a contribution towards the expense of engaging a special investigator to examine and report on the establishment of a Road Fund.

Carried.

44. Proposed by Mr. S. N. Ure and seconded by Mr. C. Lake :

That the Reserve Fund be increased by Rs. 20,000.

Carried.

45. Proposed from the Chair :

That the present Auditors Messrs. Fraser and Ross be elected as Auditors for the current year on the same remuneration as heretofore.

Carried.

46. Proposed by Mr. H. J. Walmesley and seconded by Mr. C. L. McLean :

That Mr. Patch be re-elected as the Mercantile Member of the Southern India Committee of the Rubber Growers' Association.

Carried.

47. Proposed by Mr. C. R. T. Congreave and seconded by Mr. P. G. Tipping :

That the Secretary be instructed to put before the Mysore Durbar the Association's view regarding the control and management of the Mysore Coffee Experimental Station and that until something definite has been arranged the services of Mr. Munro be retained and the Sidapur Station be maintained under his control.

48. Proposed by Mr. A. C. Cotton and seconded by Mr. J. S. Hawkins :

That an assistant for Dr. Shaw be engaged at once and that the other provisions of the amended Scheme for the Tea Scientific Department come into force as from the first of the financial year.

Carried.

49. Proposed by Mr. H. R. Carson-Parker and seconded by Mr. F. G. Millar :

That a scientific assistant for the Mycological Station be engaged as early as possible and that the other provisions of the scheme be brought into force from the beginning of the financial year.

Carried.

50. Mr. R. W. Fowke was unanimously re-elected as Chairman for 1926-27.

The proceedings then terminated.

DISTRICT ASSOCIATION MEETINGS

A. MUNDAKAYAM PLANTERS' ASSOCIATION (INCORPORATED)

Minutes of a Quarterly General Meeting called by notice dated July 23, 1926,
held in Mundakayam Club at 3 p.m., on August 7, 1926

Present

Messrs. C. L. McLean (*Chairman*), A. W. Leslie, S. N. Ure, R. M. Saywell, B. S. I. Champion, E. J. Thom, M. S. Calderwood, F. Hawkings, M. R. Coghlan, and G. A. Rutherford (*Honorary Secretary*).

Notice.—The Honorary Secretary read the notice calling the meeting.

BUSINESS

(1) *Minutes of Meeting of Committee of Management held at Mundakayam Club on July 21, 1926*.—These were read by the Honorary Secretary and it was proposed by Mr. E. J. Thom and seconded by Mr. S. N. Ure that they be approved.

Carried.

(2) *Thirty-third Ordinary Annual General Meeting of U.P.A.S.I. Appointment of Delegates*.—Messrs. C. L. McLean and S. N. Ure were appointed.

The Draft Agenda was gone through and discussed and it was resolved that our delegates be instructed in the following items :

(No. 3) *Accounts*.—(a) Enquire into the necessity of an Assistant Secretary.

(b) Enquire into the matter of subscriptions owed by certain rubber estates, which had resigned and were written off and charged to rubber ; whereas only the special process should have been so charged and the balance to General Funds.

(c) Protest strongly against any proposal that the surplus rubber Funds saved on the Mycological Station during the year be credited to General Funds instead of being carried forward to the credit of rubber.

(No. 11) *U.P.S.A.I. Sports Club*.—To move an amendment if necessary to defeat the proposal that the Planters' week be changed from Ootacamund to Coonoor.

(No. 13) *Political Representation*.—Propose the following resolution :—

'That this Association withdraws from the arrangement made in 1924 with the Madras Chamber of Commerce, the Madras Trades Association and the European Association for a salaried Political Representative.'

The Honorary Secretary was instructed to write into the Executive Committee asking permission for our delegates to do so.

(No. 19) *Roads*.—Support the resolution being proposed by the Central Travancore P.A. regarding 'the bad condition of the Kuruvanuthu-Periakolam Road.

(No. 22) *Labour Department*.—Support the resolution being proposed by the Executive Committee.

(No. 28) *Roll of Honour*.—State that this Association is in favour of this being erected in the U.P.A.S.I. Offices in Madras.

(No. 35) *Scientific Department*.—State that this Association is against the R.G.A. proposals.

(No. 36) *Budget and Finance*.—Propose the following resolution :—

'That the Reserve Fund be increased by Rs. 20,000.'

The Honorary Secretary was instructed to write into the Executive Committee asking permission for this resolution to be proposed by our delegates.

(3) *Cattle Pounds on Estates*.—The Chairman informed the meeting that Mr. J. B. Cook, the Planting Member, had been written regarding this

matter and that the Kanan Devan P.A. and the Travancore Combined P.A. had been advised. A reply is awaited from the Planting Member.

(4) *Rubber Stealing*.—The Chairman informed the meeting that the Planting Member had also been written regarding this and to press that Mr. Murphy be appointed an Honorary Justice of the Peace, having in view the favourable answer our Delegate received at the Sri Mulam Popular Assembly.

(5) *Any other Business*.—(a) *Travancore Export Duty on Rubber*.—The Honorary Secretary read a letter from the Honorary Secretary, Travancore Combined Planters' Association, regarding the above and the matter was discussed. The Honorary Secretary was instructed to reply to the queries.

There being no other business the meeting then terminated with a vote of thanks to the Chair.

G. A. RUTHERFORD,
Honorary Secretary.

C. L. McLEAN,
Chairman.

B. THE WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of an Extraordinary General Meeting of the West Coast Planters' Association
held on Saturday, July 17, 1926, in the Malabar Club, at 2.30 p.m.

Present

Messrs. C. E. M. Browne (*Chairman*), T. W. H. Fitchett, H. J. Walmesley, H. R. Carson Parker, P. N. Ashby, A. R. Turner, F. A. J. Caryll, W. L. Bruce, J. T. Murray (*Honorary Secretary*), and M. R. Fetherstonhaugh and W. L. Campbell, *visitors*.

1. Minutes of last meeting were read and confirmed.
2. *U. P. A. S. I. Annual General Meeting*.—Messrs H. J. Walmesley and H. R. Carson-Parker were elected as Delegates and instructed.
3. *U. P. A. S. I. Sports Meeting*.—It was suggested that, in view of the difficulty of arranging a date in the spring to suit Tea, Rubber and Coffee interests, a Sports Meeting be held after the monsoon in Bangalore which might overcome all difficulties.

4. *Benevolent Fund*.—Proposed from the Chair that the Secretary be instructed to circulate all members and ask them to subscribe generously to the Fund according to their means.

5. *Labour*.—The Secretary was instructed to draw the attention of the director of Labour Department to the alarming increases in the amount of advances now being offered to coolies in Malappuram by estates in other Districts.

Proposed by T. W. H. Fitchett and seconded by C. E. M. Browne that in view of the fact that since the repeal of the Criminal Breach of Contract Act XIII of 1859 there have been numerous cases of estate labourers having deliberately repudiated liability to work according to agreements entered into and for money advances received, it is resolved to approach the Collector of Malabar to ascertain as to what steps have been taken to extend the working of the Madras Planters' Labour Act I of 1903 to Planting Districts in Malabar.

6. *Roads and Communications*.—It was reported that nothing had been done by the Malabar District Board to the bridges on the Manjeri-Kalikavu Road complained of and the Honorary Secretary was instructed to again bring this matter to the attention of the Board.

With a vote of thanks to the Chair and the Malabar Club for the use of the room the meeting terminated.

J. T. MURKAY,
Honorary Secretary.

C. E. M. BROWNE,
Chairman.

C. SOUTH TRAVANCORE PLANTERS' ASSOCIATION (INCORPORATED)

Minutes of the Second Quarterly Meeting held at the Quilon Club, Quilon,
at 10 a.m., on Saturday, August 14, 1926

Present

Messrs. T. L. Jackson (*Chairman*), A. H. L. White, E. T. C. Farr, R. N. W. Jodrell, T. P. M. Alexander, W. Gillespie, A. J. White, L. J. T. Polgreen and F. G. Millar (*Honorary Secretary*).

Visitor

Capt. Cockaday.

The Honorary Secretary read the notice calling the Meeting.

The Chairman addressed the members as follows :—

GENTLEMEN,

Before taking up the ordinary business of the meeting it is my sad duty to ask you to accord a vote of sympathy to the widow and family of the late Mr. D. G. Cameron who died at his estate Mahendragiri on the 9th instant.

As most of you are aware Mr. Cameron was the 'Grand Old Man' of the planting industry and came to South Travancore in 1872 and although not a member of this Association at the time of his death he has been closely connected with it in the past.

May I ask you gentlemen that you express your concurrence in the usual manner.

1. Minutes of the Annual General Meeting of May 15, 1926, having been published in the *Planters' Chronicle*, were taken as read and confirmed.

2. *Election of Delegates to U. P. A. S. I. Annual and General Committee Meeting, Bangalore.*—Proposed by Mr. R. N. W. Jodrell and seconded by Mr. A. P. D. Lodge that the Chairman and Honorary Secretary represent the Association at the Bangalore Meeting.

Carried.

3. *U. P. A. S. I. Agenda.*—The Honorary Secretary read the Agenda. The members discussed the 'Notes on Agenda' and the Delegates were instructed on the various points.

4. *U. P. A. S. I. Scientific Department.*—Circular, dated July 3, in regard to the organization of the Scientific Department was read. A considerable amount of discussion between members followed in regard to the appointment of touring officers as assistants to the Tea and Rubber Specialists. There appeared to be a general concord of opinion that European touring officers should be appointed and that their services would be appreciated by the planting community.

5. Proposed by Mr. T. P. M. Alexander and seconded by Mr. E. T. C. Farr.

'That our Delegates be asked to press for an assistant to Mr. Ashplant; but failing the adoption of the engagement of an European, that an Indian Officer under the Rubber Specialist be engaged to visit estates, purely as a touring Officer.'

Carried.

6. *Rubber Growers' Association*.—The Honorary Secretary read the correspondence with Mr. L. A. Lampard, the Association's representative on the R. G. A. Local Committee, South Indian Branch, with regard to various matters communicated by Secretary, R. G. A. Cochin.

7. *Rules and Regulations in regard to U.P.A.S.I. European Employees' Provident Fund*.—These were approved.

8. *U.P.A.S.I. Labour Department. Rules of Employment Allowances. Leave and Scale of Pay*.—The revised scale of pay, etc., drawn up by the Executive Committee as at May 21, was carefully gone through and adopted.

9. *Lady Ampthill Nursing Institute, Madras*.—The Honorary Secretary explained that under a new medical scheme certain estates were now contributing direct and he would ask for sanction to send a contribution of Rs. 25 per estate for estates which did not come under this scheme.

Proposed by the Chair, 'That the subscription to Lady Ampthill Nursing Institute from this Association for estates outside the Malayalam Plantations, Ltd., be passed for the present year by the S.T.P.A. and that in future years all estates make their own arrangements through the Honorary Secretary.'

Carried.

10. *Roll of Honour*.—The U.P.A.S.I. Secretary's letter of May 8, covering preliminary list of South Indian Planters who served in the Great War was read and the matter discussed. The delegates were instructed as to the views of the members.

Proposed by Mr. A. P. D. Lodge and seconded by Mr. A. J. White that the wording should be altered to read 'those Planters who left S. India to serve in the Great War.'

Carried.

11. The question of having a memorial in Quilon for these who gave their lives 1914–1918 was brought up and it was proposed by Mr. T. P. M. Alexander and seconded by Mr. T. L. Jackson:

'That a brass tablet be erected in the Quilon Church in memory of men in the South Travancore Planting District who were killed or died through the effect of the Great War.'

Carried.

12. *Tour of the Rubber Specialist*.—Mr. W. Gillespie brought forward the question of the desirability of asking Mr. Ashplant to make a tour of the rubber estates in South Travancore.

Proposed by Mr. Gillespie and seconded by Mr. A. J. White:

'That the Honorary Secretary be instructed to write to Mr. Ashplant with a view to arranging an annual visit to all rubber estates in the South Travancore Planting Association.'

Carried.

The Honorary Secretary said that he would probably be seeing Mr. Ashplant in Bangalore and would consult him on the matter.

With a vote of thanks to the Chair the meeting terminated.

F. G. MILLAR,
Honorary Secretary.

THOS. L. JACKSON,
Chairman.

THE CONTROL OF RUBBER DISEASE

BY

J. MITCHELL, A.R.C.Sc.

(Concluded from page 563 issue of August 21, 1926)

After bark rot has appeared the most effective disinfectant appears to be Cargillineum Mixture applied two or three times at intervals of a few days and then once a month to the whole of the tapped panel.

Numerous Mixtures of a nondescript type such as tar and tallow, tar and liquid fuel, clay or cowdung mixed with copper sulphate or with Brunolinum are used on many estates but these give varying results and cannot be recommended with any confidence.

For 'Patch Canker' it is recommended that attention be confined to the main stem up to 10 feet from the base and that all excessive scraping well up in the branches should be discontinued. The apparent prevalence of this disease on some estates is largely due to excessive zeal on the part of untrained coolies. Generally speaking 'Patch Canker' does little real damage on Ceylon estates.

For 'Brown Bast' the ordinary deep scraping method is still the most suitable for Ceylon but very great care has to be exercised and close supervision is required to ensure that the whole of the diseased area has been treated. In view of the good results achieved by the 'isolation' method recommended by Mr. Keuchenius the scraping method can be improved upon by making a cut to the wood all round the treated area on completion of the scraping operations. As a result of scraping a new tappable bark is produced at a much enhanced rate and by an 'isolation' cut the possible spread of the disease is checked.

'Die-back' and 'Pink Disease' are not very common in Ceylon and by the early removal of the affected portions of the tree an effective check on these diseases is secured.

Leaf diseases.—Secondary leaf-fall caused by *Phytophthora* sp. is too well known to require any description in this place. The annual recurrence of this is undoubtedly causing a steady depreciation on the estates so affected. Unfortunately, the nature of the disease has, up to the present time, made it extremely difficult to devise means of dealing with it. During the past few years the financial condition of the rubber industry has been such that methods which might be beneficial were impracticable owing to the cost entailed. There are indications that manuring with manures containing an excess of nitrogen is likely to bring about a steady improvement in this respect and it is likely that manuring on a much larger scale than has been possible for some years will now be undertaken.

Again, on estates in South India very encouraging results have been secured by spraying prior to the advent of secondary leaf-fall. The Research Scheme has kept in close touch with this work, and it is proposed to carry out similar experiments in Ceylon during May so that the difficulties to be overcome under Ceylon conditions and the cost of the operations can be ascertained. It would appear that a very difficult problem which has confronted the rubber industry for some years is likely to be, to some extent solved or at least some measure of real improvement secured.

A less known leaf disease caused by *Oidium* sp. appeared on a relatively large scale for the first time during March, 1925, and may prove to be of serious consequence. It is not possible to make any suggestions at

the present time as to the lines on which effective control can be secured. There has been a recurrence of the disease this year but up to the present time it has been very slight.

Finally, it is desirable to draw your attention to a very important point, and that is that the success of any methods of this kind must depend not only on the advisory and research officers but on everybody who has anything whatsoever to do with the rubber industry. It begins in the laboratory and ends with the Director of the Company. Everybody must take some share of the responsibility. The research officers in the laboratory can give us the histories of these diseases; the advisory officer can take the information to the estate and in every possible way demonstrate how to deal with them. The Superintendent has then to take a hand and a very great responsibility is imposed upon him of carrying out as far as he possibly can the methods that have been recommended. Further than that we have the V. A. who recommends the votes of money and who has to give all encouragement possible to the Superintendent in the work he has got to do, and finally, the Directors of the Company, if they appreciate the need of keeping their estates in first class condition should not hesitate to vote the amount of money required.

It is recommended that estates provide an emergency estimate, so that if it became necessary at any time to increase the vote for the arresting of any disease the money would be immediately available.

It could be taken for granted that Superintendents would make the best use of monies allotted for disease work for the experience of four years' visiting of estates throughout the Island has shown that Superintendents take the keenest interest in these matters and show every possible desire to eradicate disease from the estates over which they exercise control.

General Considerations.—In course of one's visiting work one has opportunities of discussing a multiplicity of subjects with planters and of obtaining their views and it is evident that one of the essential factors for successful work in the field is the establishment and retention of a close co-operation between the research officers and the work which is being done on estates. One means of conveying information is by the issue of Bulletins and Circulars describing the work of research officers in language which can be easily understood by the planter. Another is by the holding of Conferences such as the present one and of District Meetings such as those which have been organized by the Rubber Research Scheme. But something more is necessary if the best results are to be obtained. Many planters do not read the literature which they receive or they read it in such a way that the information contained therein is not properly assimilated. In Public Meetings most planters are usually diffident about asking questions or to give their views on such matters and it is equally difficult to give a full answer to questions under such circumstances. That is, the pros and cons of a subject can rarely be thrashed out. These difficulties can easily be overcome when opportunities for discussing them with the planters personally are arranged for and this becomes possible on the estates. It has, therefore, become a matter of first rate importance for the well-being of an agricultural industry such as Rubber that there should be what is comparable to the general practitioner in medicine. Some such officer should be available at all times to visit estates, to go into the problems on the spot and endeavour to overcome the difficulties which so frequently arise.

The Tropical Agriculturist.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

EXPORTS OF FERTILIZERS AND OILSEEDS FROM THE MADRAS PRESIDENCY

(From a Correspondent)

The figures of export by sea of bones, oil cakes, oil seeds, and horns from the Madras Presidency for the quarter ending June 30, 1926, are shown in the following table, and call for no comment except that they are much smaller than during the first quarter of the year.

A. EXOPRTS OF INDIGENOUS FERTILIZERS FROM THE MADRAS PRESIDENCY

FROM APRIL 30 TO JUNE 30, 1926

Country to which exported	BONES	OIL-CAKES				OIL SEEDS				HORNS
		Ground-nut	Gingelly	Castor	Others	Ground-nut	Gingelly	Castor	Others	
Tons	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	
Ceylon	1,169	30,465	90,307	256	...	21,494	129	...	2,288	...
France	723	...	...	...	...	904,688	4,009	9,000	...	230
Germany	...	...	...	...	8,098	126,921	...	..	401	341
Netherlands	...	...	...	...	...	370,367	...	...	...	360
Spain	...	...	...	...	...	42,008	...	...	...	...
Italy	...	...	...	...	...	167,205	...	...	...	...
United Kingdom	...	2,000	...	...	...	60,216	...	...	501	1,867
America	...	...	...	...	...	3	...	138,652	...	...
S. S. & F. M. S.	...	319	238	...	2	...	...	...	...	...
Egypt*	...	...	...	...	...	84,108	...	...	...	...
Belgium	...	...	...	...	...	27,003	...	10,000	...	...
Total	1,892	32,784	90,545	256	8,100	1,804,013	4,138	157,652	3, 0	2,798
Total 1st quarter 1926...	1,986	95,923	90,386	10,394	284	4,111,898	59	53,924	11,417	3,375
Total to Date	3,878	128,707	180,931	10,650	8,384	5,915,911	4,197	211,576	14,607	6,173

* Port Said for orders.

B. RICE—EXPORTS FROM AND IMPORTS TO THE MADRAS PRESIDENCY

FROM APRIL 30 TO JUNE 30, 1926

The Rice account of the Presidency is always of interest to the planters. During the quarter our exports by sea amounted to 30,996 tons valued at nearly 62½ lakhs, and our imports amounted to 9,880 tons valued at 14 lakhs. The details are shown in the following table.

Country	EXPORT			IMPORT		
	Rice		Paddy		Rice	
	Quantity Cwts.	Value Rs.	Quantity Cwts.	Value Rs.	Quantity Cwts.	Value Rs.
Ceylon	605,675	61,28,473	5,926	34,564	...	...
S. S. & F. M. S. ...	8,137	75,453	...	...	...	...
Burmah	65	750	...	...	197,544	13,94,132
Natal	130	1,500	...	...	...	...
Bombay	...	...	...	...	48	630
Karachi	...	...	...	...	3	32
Total	614,007	62,06,176	5,926	34,564	197,595	13,94,794
1st Quarter 1926 ...	452,855	46,10,755	12,565	68,336	201,473	13,80,747
Total to Date	1,066,862	1,08,16,931	18,491	102,900	399,068	27,75,541
					13	116

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending August 21, 1926
Bank Selling Demand Draft on London

16th	17th	18th	19th	20th	21st
17 31/32d.	18d.	18d.	18d.	18d.	17 31/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending July 31, 1926	January 1 to July 31, 1926	January 1 to July 31, 1925
(A) TEA (WEEK ENDING JULY 31, 1926)		s. d.	N. India.	s. d. 1 5.80	s. d. 1 8.60	s. d. 1 5.25
			S. India	**1 5.14	††1 8.57	††1 6.30
			Ceylon...	1 6.05	1 8.99	1 7.80
			Java ...	1 2.88	1 4.76	1 0.80
			Sumatra.	1 3.34	1 6.07	1 4.48
(a) Anamallais—			Nyassa-land	†	1 5.93	1 1.50
Selaliparai ...	108	1	1 a' ...	*1 5.48	†1 8.32	†1 5.72
Karakundru ...	...	5				
Kallyar ...	284	4 3/4				
Shollayar...	23	1 4 3/4				
(b) Central Travancore						
Twyford ...	40	1 6				
Glenmary ...	141	1 5				
Koliekanam ...	104	1 5				
Caradi Goody ...	100	1 5				
(c) Kanan Devans—						
Kalaar ...	72	1 6 1/2				
Letchmi ...	115	1 6 1/4				
Guderal ...	162	1 6				
Munnar ...	105	1 6				
(d) Nilgiris—						
Prospect ...	256	1 8 1/4				
Terramia ...	67	1 6 3/4				
Glendale ...	129	1 6 1/4				
Nonsuch ...	99	1 6 1/4				
(e) Nilgiri-Wynaad—						
Seaforth ...	132	1 5 1/2				
Barwood ...	105	1 4				
(f) South Travancore—						
Poonmudi ...	135	1 4 1/2				
Merchiston ...	83	1 4 1/4				
Goatfell ...	76	1 4				
(g) Wynaad—						
Fringford ...	66	1 4				
Erramaculla ...	60	1 4				
Elstone ...	40	1 3 1/2				

(B) COFFEE

London Prices (seven days ending August 3, 1926)

No Public Auctions were held during the seven days under review.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, August 24, 1926, was 19 1/4d.

** Based on 4,570 packages.

†† " " 102,922 "

†† " " 105,158 "

* Based on 47,773 packages.

† " " 1,884,634 "

† " " 1,733,415 "

(b) *Précis of Reports on the London Market received on Monday, August 23, and covering the seven days ending Tuesday, August 3 :—*

(1) *Tea*.—No sales were held during the seven days under review ; but the average prices obtained on the preceding Monday, i.e., July 26, are given on the previous page. South Indians were in good demand and fetched better prices than those which obtained in the previous week.

(2) *Rubber*.—The 'spot' price during the seven days under review remained at about 20½*d.*, and a satisfactory American demand counter-balanced any tendency towards depression which resulted from the announcement that the average price for the May-July quarter was just over 1/9*d.* and that consequently 100 per cent of the Standard Production would be exportable at the minimum rate of duty during the three months ending October 31.

(3) *Coffee*.—No public auctions were held during the seven days under review as they were suspended until Tuesday, August 10.

III. Weekly Rainfall Statement

From Sunday, August 15, 1926, to Saturday, August 21, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	1.95	46.96	48.91	19. Naduvattam	N.R.	N.R.	N.R.
2. Kalthuritty.	3.24	77.50	80.74	20. Coonoor ...	...	11.85	11.85
3. Tenmalai ...	N.R.	85.01	N.R.	21. Kotagiri ...	0.06	22.35	22.41
4. Mundakayam.	7.24	96.20	103.44	22. Ootacamund	0.24	29.51	29.75
5. Peermade ...	8.58	132.64	141.22	23. Yercaud ...	0.84	24.39	25.23
6. Twyford ...	9.53	144.96	154.49	24. Devala ...	N.R.	107.32	N.R.
7. V'periyar ...	2.84	60.87	63.71	25. Gudalur ...	N.R.	61.79	N.R.
8. Kalaar ...	11.62	147.78	159.40	26. CALICUT ...	2.44	97.44	99.88
9. Chittuvurrai	0.55	24.36	24.91	27. Kuttiyadi ...	N.R.	118.58	N.R.
10. BODI'KANUR	0.12	5.42	5.54	28. Vayittiri ...	9.15	150.91	160.06
11. COCHIN	4.48	81.45	85.93	29. Manantoddi.	5.11	84.96	90.07
12. Mooply Valley.	5.98	97.83	103.81	30. Billigiris ...	0.91	26.24	27.15
13. Pachaimalai.	5.82	92.41	98.23	31. Sidapur ...	2.62	57.16	59.78
14. Mudis ...	14.08	176.11	190.19	32. Pollibetta ...	3.57	78.29	81.86
15. Nell'pathy...	3.42	73.68	77.10	33. Somwarpett.	4.69	53.47	58.16
16. POLLACHIE.	0.52	19.37	19.89	34. Ballupete ...	4.01	48.89	52.90
17. Manjeri ...	5.13	100.37	105.50	35. MANGALORE	3.38	82.69	86.07
18. Nilambur ...	6.26	92.44	98.70	36. MADRAS ...	0.61	4.16	4.77

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 36] SAT., SEPTEMBER 4, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	593	B. Spraying of Coffee ...	604
Kenyan Coffee ...	594	C. and D. Political Repre-	
Tea and Rubber in Ceylon ...	596	sentation ...	604
The Budding of Rubber ...	601	Commercial and Meteorolo-	
Letters to the Editor—		gical ...	605
A. Proposed Road Fund ...	603		

EDITORIAL NOTES

We tender our hearty, if somewhat belated congratulations to Mr. R. Fowke on his re-election as Chairman ; or perhaps, in view of his sterling services during 1925–26, we should rather say on behalf of our Readers that the U.P.A.S.I. are to be congratulated in having secured his services for another year.

We would reiterate the recommendation we made last week that Readers requiring the verbatim report of the speeches made at the recent Annual Meeting should IMMEDIATELY place an order for 'The Book of Proceedings' with the Secretary, U.P.A.S.I., Post Box 155, Madras. Large single orders, e.g. for 70 and 40 copies, have already been received ; and the Secretary cannot guarantee that he will be able to supply copies to any one who has not sent in his order by the end of next week.

The Tea and Coffee Trade Journal understands that the Entomologists in Java have achieved considerable success in their Anti-Stephanadores Campaign. Wasps which parasite on the pest have been imported from Uganda and are being propagated on a large scale on two nurseries in Java ; and an ant that digs the larvæ out of the berries has also been found and is being bred.

We understand that Coffee Planting on an extensive scale is being seriously considered in North Transvaal. As far back as 1880 two brothers named Dicke established a Plantation near Tzaneen which at the end of the last century had 8,000 trees in bearing and 12,000 trees coming on. Although this particular plantation was finally destroyed by disease, it is reported that coffee is now being planted on the slopes of Brackensberg, and a Ugandan Planter recently found excellent coffee soil on a farm at Dulvelskloof where the yield was averaging 2·7 lbs. per tree.

THE HISTORY OF KENYAN COFFEE

BY

J. FRANKLIN

Nairobi, Kenya Colony

Coffee planting in the Highlands of Kenya, or British East Africa as it was then known, dates only from 1900, but so rapid has been its advance, in spite of the drawbacks of diseases and labour shortage, that the total area under this crop is now 65,140 acres, according to official figures, which area is controlled by 696 planters, who represent 41 per cent of the total number of occupiers of land in the country.

The planting of coffee was very slow in the beginning, as little interest was taken in the industry by the government, and it was not considered as a proved crop to the satisfaction of planters generally, who had little capital to invest in experiments. This is not to be wondered at, however, considering the unsafe and backward condition of the country at that time, when no one could move far from the railway without an armed escort.

The latest customs report (for 1925) gives the export of coffee from Kenya at 147,257 cwt. valued at £823,901, compared with 186,081 cwt. valued at £636,744 in 1924. These figures therefore represent a very considerable effort, as planting out on anything like a serious scale has been done only in recent times. Even as late as 1920 there were only 7,060 acres of fully productive (six-year-old) coffee trees in the country, as against the present total of 21,253 acres of fully productive and 17,713 semiproductive (three to six years old) trees. Since coffee has proved itself in the country as an economic crop, it has been the most important factor in development and has brought the biggest financial returns of any of the crops exported.

LABOUR SHORTAGE BECOMING ACUTE

The coffee industry is at present being faced with a very serious factor in the shortage of native labour, which is becoming more and more acute as time goes on, and, because sufficient labour cannot be secured even to pick the crop, the additional planting out of young trees has necessarily to be largely curtailed. To show the damage sustained by planters owing to shortage of picking labour, it will be necessary only to cite the case of Mr. Hemsted of the Uasin Gishu, whose losses last season from this cause amounted to £3,500 worth of coffee, which rotted on the trees. Many other planters suffered, but not to such a serious extent. Measures are to be taken by planters to overcome this labour shortage.

From these statements it will be gathered that the coffee industry of Kenya, although yet in its infancy, is capable of great expansion and corresponding export value. It will therefore be interesting to record the work of pioneers who have been responsible for its inception. There are many reports concerning individuals who are supposed to have brought coffee to this country, and the writer has been busy for some time in sifting out this information.

FIRST PLANTING OF COFFEE

The first coffee in Kenya was that planted by John Patterson, who left London in 1893 with Dr. Charters, who had been appointed by the late Sir William Mackinnon to succeed Dr. Moffat as superintendent of the Scottish Mission at Kibwezi.

On the voyage out Dr. Charters received a box of coffee seed at Aden from the agents of the British India Shipping Co. He was told that it was

Coffea Arabica, but it was subsequently found to be a hybrid and not a pure variety. Mr. Patterson reached Kibwezi on March 15, 1893, and the seed was sown a week later. The young trees were planted out in November, 1893, and the first crop was picked in 1896. Some seed from this crop was sent to Dr. Boedeker, who had just arrived in the country, and the young trees from this seed were planted out at old Ft. Smith, not far from Nairobi, where they may be seen to-day.

After planting out the coffee at Kibwezi Mr. Patterson realized that the rainfall there was insufficient, and an irrigation channel was made from the Kibwezi stream to the plantation. The coffee grew, and looked well under irrigation until the time Mr. Patterson left for Home at the end of 1897.

On his return he found all the coffee trees dead, for irrigation had not been carried out in his absence, as the mission had to be abandoned on account of the unhealthiness of the district and the low rainfall. Mr. Watson, who was the mission superintendent at this time, on being instructed to remove the mission stock to Kikuyu, sent on a cartload of the coffee berries from the trees at Kibwezi, but as these berries were exposed to the tropical sun in an open cart for weeks on the journey they were useless, less than 100 seeds germinating out of the whole lot. A fresh start had to be made with this small quantity, and no seed was available for the settlers, who began to arrive about this time, when the railway had got through as far as Kikuyu.

Mr. Patterson planted out his estate at Thika with the seed brought from Kibwezi, but he once informed the writer that he was sorry he had done so, as the French Mission coffee succeeded much better in the district. About 1903, Mr. Patterson gave some of his seed to members of the Colonists' Association, and Mr. T. A. Wood also distributed Blue Mountain (Jamaica) seed which he had imported. No really serious effort at coffee planting can be recorded for this time, and no one had an idea that the industry would ever be of much importance.

BEGINNING OF THE INDUSTRY

The honour of having planted the first and permanently successful coffee in the Highlands goes to Solanus Zipper, a lay brother of St. Austin's Mission near Nairobi. This mission was the first estate in Kenya Colony that ventured to go in for coffee as a plantation. A start was made in 1900 by Brother Solanus with 100 plants as an experiment. The seedlings, 10 months old, were planted in November of that year along the walks of the kitchen garden of the mission, and their healthy appearance and the heavy crops that they continue to bear after 25 years are best proof of the suitability of the country for the cultivation of that particular variety of coffee.

The coffee planted at this mission is the Arabica known as Mocha. The seeds were obtained by Father Etienne, the pioneer missionary of the Holy Ghost fathers in Zanzibar and East Africa. When Father Etienne died at Zanzibar in 1913 he had 50 years' mission work in East Africa to his credit.

After a few years' hesitation, some of the settlers recently established in the Kikuyu Highlands took to planting coffee with seed secured from the mission. Having no initial capital, the mission could not develop the industry on a large scale, and planting was extended gradually as the revenue derived from the first trees permitted.

As in other countries, the coffee met with enemies in its new home. The leaf disease *Hemileia vastatrix*, thrips, several scales, antestia bug, and mealy bug appeared one after the other and still try to feed on their new host. Besides these pests, drought has also to be reckoned with; but, in

spite of them all, coffee is thriving, and with intelligent help stands every chance of remaining established for good.

Of the 65,140 acres under coffee in Kenya, 260 acres are in the pioneer plantation of St. Austin's Mission, which has practically acted as nursery for the plantations of the country.

A special feature of the mission plantation is the fact that it is a total benefit to the country. Not only has it introduced the coffee and provided seed for planting out, but the whole of its revenue is spent for the establishment and development of Catholic missions in Kenya, none of it goes to the missionaries themselves.

‘*The Tea and Coffee Trade Journal.*’

TEA AND RUBBER IN CEYLON

The Honourable Mr. F. A. Stockdale, Director of Agriculture, Ceylon, makes the following remarks on Tea and Rubber in his Administration Report for 1925 :—

GENERAL SURVEY

TEA

The tea industry had another prosperous year. In the districts on the south-west side of the Island very satisfactory crops were secured as the south-west monsoon was an exceptionally mild one. Uva, however, suffered from a severe and prolonged drought and crops on that side were, in consequence, short. The total exports amounted to 208,464,971 lb. of black tea and 1,326,413 lb. of green tea of a total value of Rs. 199,697,534, as against an export of 203,278,476 lb. of black tea and 1,651,831 lb. of green tea of a total value of Rs. 214,930,307 in 1924. Prices were lower than during the previous year and averaged in local sales 96 cents per lb., as against Re. 1.04 per lb. Prices during the early part of the year declined, but a very high average standard of quality was maintained during the second half of the year, and prices for Ceylon teas stood at a higher average than those of other tea-producing areas.

Tea, on the whole, looks vigorous throughout the Island and determined efforts are now being made upon some estates to tackle the problem of soil erosion. Unless this is done, tea is bound in time to lose vigour and to produce reduced crops. Liberal cultivation and manuring programmes are generally adopted by all estates, and consequently average crops are being maintained. These crops will not, however, continue to be secured if soil erosion is not stopped and the humus content of the tea soils improved. The extension of *Gliricidia maculata* as a permanent green manure continues, and the Experiment Station at Peradeniya sold 40,350 cuttings during the year. The weight of loppings from *Gliricidia* on this station during the year was 10.3 tons of green material, as against 4.9 tons from dadap. *Indigofera endecaphylla* appears to be the most suitable creeping cover crop for tea cultivation so far tested, and the demand for seed and for cuttings has been considerable.

The shot-hole borer pest has been less prevalent than it was some years ago. It has been demonstrated by the experiments of the Department of Agriculture that the damage done to the tea bush by this pest can be repaired by liberal manuring, and nitrogenous manures, on the whole, give the best results. Several complaints have been received in regard to tortrix, and the loss of flush on some estates has been considerable. There would appear to be evidence that the area affected has not extended, but that in some of the more recently infested areas damage has been greater than in previous years, while in the older infested areas the attack has been less

severe than it was several years ago. A survey of the situation is to be undertaken by the entomological officers of the Department of Agriculture early in 1926. The termites are also under investigation as these pests are the most serious pests affecting tea at the present time. Scale insects (*Coccus viridis* and *Saisettia hemisphericum*) were reported as being prevalent in the Haputale and Bandarawela districts towards the latter part of the year. Their increased prevalence was doubtless due to the prolonged drought which these districts experienced during the year, and the general situation in regard to these pests is better than it was some years previously. The leaf disease caused by *Cercosporella theæ* was the cause of the loss of a considerable amount of flush on several estates in the Nuwara Eliya District. It becomes prevalent and serious in the south-west monsoon, and as it spreads to tea in most cases from *Acacia decurrens* grown as a green manure, certain estates will have to consider seriously the frequent lopping of this tree in the worst of the south-west monsoon weather or of its replacement by another plant. Branch cankers and wood rots have been under investigation during the year, and the experiments which are being made on several estates in the filling of cavities in the stems and branches are being carefully watched. The branch canker fungus *Macrophoma theicola* has been found to affect tea leaves, but it is not anticipated that it will give rise to a leaf disease of any seriousness.

The extension of the tea-growing area continues, and prices for tea seed ruled high during the year on account of the increased demand. Imports of tea seed from Java and Sumatra during the year amounted to 17,707 lb. The total number of plants sold under permit during the year was 4,020,253, or nearly 2,800,000 in excess of the previous year. An increasing number of small holders is planting tea in the Central Province and the business of bought-leaf factories continues to be prosperous.

Improvement of housing accommodation for labour continues, and special attention is being given to the improvement of water supplies and to latrine accommodation. Improvements in factory equipment also continue, and the importance of improvements in manufacturing processes is becoming generally recognized.

The Ordinance incorporating the Tea Research Institute was passed by the Legislature in October, and the collection of the cess authorized by this Ordinance commenced as from November 12.

RUBBER

The exports of rubber were restricted in accordance with the Stevenson Restriction Scheme during the year. The exportable percentages varied as follows:—January 50 per cent., February-April 55 per cent., May to July 65 per cent., August to October 75 per cent., and November-December 85 per cent. of the standard production. The total exports amounted to 45,618 tons of a value of Rs. 169,992,247, as against 37,036 tons of a value of Rs. 63,749,711 in 1924. The exports of latex amounted to 6,748 gallons of a value of Rs. 27,364, as against 26,545 gallons during the previous year. Stocks in godowns of members of the Colombo Rubber Traders' Association amounted, at the end of the year, to 4,421 tons.

The average price at the local auctions was Re. 1.73 per lb., as against 75 cents during the previous year. A sharp rise in the price took place early in May, and in July local sales were effected at Rs. 2.83 per lb. In August prices dropped, but later there was a steady rise until the first sale in December. Considerable speculation in shares and in rubber took place, but the steadily increasing demand for rubber at increased prices has resulted in the renewed confidence of all in the future of the industry.

The quality of both crêpe and sheet rubber has been well maintained, and with the recovery of prices the manufacture of sole crêpe and sole sheet has been reduced very considerably.

The use of formic acid as a coagulant instead of acetic acid was begun during the year in consequence of the reduction effected thereby in the cost of coagulation. The use of paranitrophenol as a preventive of mould on sheet was experimented with during the year and found to be satisfactory.

An abnormal leaf fall caused by a species of *Oidium* occurred during the early part of the year, shortly after the young leaves appeared after the wintering of the trees. This disease has not previously been recorded in Ceylon, although it has previously been reported from Java and Sumatra. It is thought that the unusually wet weather in the early part of the year might possibly have been an important factor favouring the occurrence of this disease. Secondary leaf-fall and pod disease caused by *Phytophthora* occurred with the heavy rains of the south-west monsoon, but was not very severe. It has been found by experiment that manuring may secure a better foliage cover after an outbreak of secondary leaf-fall than if manuring is not carried out. The treatment of root and bark diseases is becoming more and more general and these diseases are generally under satisfactory control. Brown bast has shown no increase, probably as the result of the conservative tapping carried on during the period of restriction. Most estates are again adopting manuring programmes, and improved health and vigour in the trees will result.

The necessity for the prevention of soil erosion on rubber estates is being realized, and, in addition to terracing, the use of creeping green cover crops is being seriously taken up. *Centrosema pubescens* and *Vigna oligosperma* have been found to be the most satisfactory, the latter being very useful in old rubber as it grows well under shade. *Indigofera endecaphylla* is also being experimented with.

The Rubber Research Scheme has done very useful work during the year in all its branches. The members subscribing to this scheme at the end of the year numbered 199, and the total acreage of members represented over 60 per cent of the total rubber area.

ENTOMOLOGICAL DIVISION

In the same Volume Mr. J. C. Hutson, Entomologist to the Department of Agriculture writes as follows :—

TEA

The investigations in connection with shot-hole borer (*Xyleborus fornicatus*) were concluded by the Assistant Entomologist during the first half of the year. A final report on manurial experiments in connection with the control of shot-hole borer and a review of all the literature relating to shot-hole borer are in course of preparation. This division is indebted to Dr. C. H. Gadd of the Mycological division who has kindly undertaken, as on previous occasions, the interpretation of the results of the shot-hole borer experiments.

The investigation of termites (*Calotermes* spp.) has been started by the Assistant Entomologist, but no definite information can be given at the present time. Early in 1926 visits will be paid by the investigator to some estates in Dimbula and Maskeliya where *Calotermes militaris* is known to be prevalent.

Calotermes dilatatus continues to be prevalent on some of the Low-country tea areas.

Tea tortrix (*Homona coffearia*) has been prevalent in the Dimbula and Maskeliya districts and is to be the subject of special investigation by the Entomologist and the Assistant Entomologists in those districts during the early part of 1926.

Among the more important caterpillar pests may be mentioned the following:—Red slug (*Heterusia cingala*) on an estate in the Galaha district; Lobster caterpillar (*Stauropus alternus*) on an estate in the Wattegama district; and the fringed nettle-grub (*Natada nararia*) on an estate in Dolosbage.

The continued prevalence of green bug (*Coccus viridis*) and brown bug (*Saissetia hemispherica*) on some estates near Haputale and Bandarawela led to the sending out of a circular letter with a questionnaire on these pests, which are to be investigated further by an Entomologist in 1926.

Tea mites, especially the 'red spider' (*Tetranychus bioculatus*), the yellow mite (*Tarsonemus translucens*), and the purple mite (*Phytoptus carinatus*) have been prevalent during the year on several estates.

RUBBER

The stems of diseased rubber trees on an estate in the Galle District were found to be attacked by the termites *Calotermes dilatatus* which were also invading the more healthy tissues.

Glyptotermes ceylonicus and *Eutermes* sp. were also found in rubber trees in a more advanced state of decay.

THE EXPERIMENT STATION

The Report of the—Manager Mr. T. H. Holland—of the Experiment Station, Peradeniya; which is also embodied in the volume; contains the following remarks:—

TEA

The results of the tea manurial experiments started in 1917 were summarized up to the end of 1924, and the conclusions placed before the Estates Products Committee of the Board of Agriculture.

During the course of the year the tea areas were reorganized as follows:—The most even portions of plots 144, 150, and 155 were subdivided into, in all, 78 plots of 40 bushels each, each plot fenced round with iron stakes and wire. The yields of green leaf from each of these plots will be separately recorded from the time the bushes come into bearing after the 1925 pruning till the 1927 pruning, after which a new series of manurial experiments will be started in these plots. In plots 141, 142, 143, 145, 146, 147, 148, 149, 163, and 164 *Indigofera endecaphylla* was planted during the north-east rains. Soil samples were taken from all plots before planting. The previous manurial treatment will be continued unchanged, and observations will be made on the effect of this creeping cover crop on the yields and health of the tea.

In the hillside tea two areas with a fairly even slope were set aside for a series of soil erosion experiments. The work in area A, which consists of 6 plots of approximately 1/34th acre each, was completed by the end of the year. Brick and cement down drains and siltpits were constructed and arrangements made to measure and record all soil washed from the plots, whether in suspension in water, or as solid matter.

The relative wash from these plots will be recorded for a year, after which the efficacy of (1) a cover of *Indigofera endecaphylla*, (2) contour hedgerows of *Clitoria cajanifolia* as wash preventive measures will be tested.

All the tea was pruned in September, October, and November, with the exception of the half acre plot which was allowed to run on to the end of the

year to enable a small experiment with Ammo-phos to be brought to a conclusion. This experiment failed to show any marked increase of yield from the use of this manure.

The popularity of *Gliricidia maculata* as a green manure and shade tree for tea has in no way decreased; 40,350 cuttings were sold to estates during the year.

A comparison of the weight of loppings from *Gliricidia* and dadaps of the same age in the $\frac{1}{2}$ acre tea plot has shown that during the year the *Gliricidias* have given 10.3 tons of green material per acre, against 4.9 tons given by the dadaps. The appearance of the tea under *Gliricidia* is distinctly superior to that of the tea under dadaps.

Small trials were made in treating decayed tea bushes either by draining the cavities and applying Skenes enamel wax and tar, or by filling the cavities. For the latter operation 'Mexphalte' mixed with sawdust and 'Plascom' mixed with liquid fuel were tried. Cleaning and filling is expensive, and further experience is needed to determine the economic value of the operation.

Vacancies in the Dark leaf Manipuri plots were supplied partly in July and partly in August. In spite of unusual droughts in July and September the percentage of survivals was higher than usual.

RUBBER

The following experiments were continued :—

1. *Old Manurial Experiment*.—The results of this experiment were summarized up to the end of 1924 and the conclusions placed before the Estates Products Committee of the Board of Agriculture. The indications are that in this case manuring has not affected the yield of rubber.

2. *Avenue Rubber Manurial Experiment*.—In this experiment three different manurial mixtures are given, in the one case with and in the other without the addition of lime. Another plot receives lime only, and this plot has given the highest yield over the whole period of the experiment. Also the plots receiving lime and manure have on the average given slightly higher yields than those receiving manures only.

3. Two experiments for the comparison of alternate day tapping with tapping every three days.

4. Comparison of a V cut with a single cut.

5. Comparison of tapping on alternate days throughout the year and daily on alternate months.

6. The recording of individual tree yields of dry rubber was continued in plots 11–15. Mr. R. A. Taylor of the Rubber Research Scheme has undertaken a fresh analysis of the resulting figures up to March 31, 1925.

A census of diseased trees was taken by the Assistant Mycologist in December.

Trials of different cover crops in the New Avenue Rubber were continued. *Indigofera endecaphylla* and *Centrosema pubescens* have given the best results.

Under old rubber attempts to establish cover crops have not been successful.

There was a considerable demand for rubber seed and several large orders were supplied.

Seed was collected from some of the best yielding trees in the blocks in which individual yields are being recorded and planted in nurseries to provide budding material for officers of the Rubber Research Scheme. Seed from high yielding trees on two estates was also received.

THE BUDDING OF RUBBER

BY

F. A. STOCKDALE, C.B.E., M.A., F.L.S.,

Director of Agriculture, Ceylon

On several previous occasions, attention has been drawn to the possibilities of budding or bud-grafting rubber. Various demonstrations in budding methods were subsequently given. It was pointed out that investigations in different rubber-growing countries had demonstrated the widely differing yielding capacities of plantation rubber trees. Observations made in Sumatra and in Ceylon have shown that yield is most probably an inherent character, as good yielders remain, if disease factors do not interfere, as good yielders, and bad yielders remain bad yielders. This appears to be established under differing soil conditions and though it is possible for yields to be increased by different cultural operations it is improbable that a bad yielder can be transformed into a good yielder.

With these facts established, it therefore became apparent that increased yields from rubber plantations could be looked for if propagation from only high-yielding stock was adopted; and two methods were available, viz., by seed selection and by budding.

The results which can be attained by seed selection are seen in the figures which have been published from the individual tapping experiment on the Peradeniya Experiment Station from the plantation raised from Heneratgoda No. 2 tree. Whereas the average yields from this plot are in excess of yields from trees of mixed parentage, they show that areas planted from seed, the maternal parent of which is known to be a high yielder, will always contain a mixture of high, moderate and low yielders. Difficulties in controlling cross-pollination and the knowledge that seedlings from a known parent gave varying results naturally suggested that budding would provide a more certain, and at the same time a quicker, means of securing plantations of high-yielding capacity.

When budding first attracted public attention extraordinary hopes were entertained by some as to the possibilities of very high acreage yields and the enthusiasm aroused received a severe set-back when the first yields from budded areas in the Dutch East Indies became available. These results did not justify the extravagant expectations of the budding enthusiasts and showed that much more experimental work was required. They came to hand when the rubber industry was in the depths of the slump and these disappointments were interpreted by many as failures. Interest in budding waned and it was only a few who persisted in their efforts.

With the recovery of the industry and the decision to plant up further new areas, interest in budding has again been aroused and a large number of growers are now desirous of undertaking the budding of considerable areas. The latest reports from budded areas in Malaya and the Dutch East Indies indicate that very high yields are being secured from budded areas and in consequence it is essential for every grower desirous of securing the highest yield from newly planted lands to undertake budding. The future of plantation rubber in the form of large estates depends upon the production of high acreage yields. There is little doubt that the production of rubber by small growers will eventually play a much more important

part in the industry than it does at present and will constitute in the long run a factor of enormous importance. The production of rubber by small growers has during the past few years increased enormously and although this output in many rubber-growing countries reacts with the price of the commodity there is no doubt that the industry will in the future secure from small growers those supplies which will keep prices on a reasonable basis. All estates therefore desirous of being prepared for the time when production will be equal to or even in excess of demand must look to either cheaper production or increased production per acre. The former may be attainable in certain cases, but is unlikely to be generally possible, and therefore those who desire to look to the future would be advised to explore the possibilities of higher acreage yields.

Budding offers these possibilities provided that certain necessary and essential preliminaries are given heed to. It is, therefore, proposed to review the results that have been secured up to date and to summarize the conclusions that are to be drawn therefrom. Production figures from large acreages of buddings have not been published but they are reported to have been in many cases 50 per cent in excess of yields from seedlings.

It has been demonstrated that high yielders do not invariably give rise to high-yielding offspring. Some high-yielding mother trees do not produce uniformly high-yielding progeny. The value of a mother tree for budding purposes can only be determined by actual tapping of the offspring. All the budded offspring of a single mother tree are referred to collectively as a 'clone' and the feature which has been shown by tappings of budded areas is the uniformity of the yields of the individual members of any one clone. All are either high yielders, moderate yielders or poor yielders. It also appears that there are high-yielding trees which give rise, under varying conditions, to clones of offspring which are uniformly high yielding.

A small number of results from the Central Experiment Station at Java indicate that there may be some influence between stock and scion. The figures available are limited and therefore the conclusions drawn from them can only be tentative. They do however indicate that the growth of the root stock is related to the vigour of the scion used and that the yield values of the stock and scion show some relation to one another. These indicate that care must be taken in the choice of stocks and that budding should be done on stock of good quality grown from seed of selected trees. It is quite possible that certain combinations of stocks and scions will give better results than others and therefore it is essential that some knowledge of the origin of the stock on which buddings are done should be available.

Tappings of budded trees have shown that yields do not increase as the cut approaches ground level as is the case with seedlings and there are indications that bark can be productively tapped at greater heights than with seedlings.

Budded trees appear to be cylindrical in shape and in this respect differ from seedlings.

The Tropical Agriculturist.

(To be concluded next week.)

LETTERS TO THE EDITOR

(*The Planters' Chronicle is not responsible for its Correspondents' Views.*)

A. The Proposed Road Fund

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

Whilst I am very much in favour of the Road Fund Scheme in general, as put forward by the Road Fund Committee at the A. G. Meeting of the U. P. A. S. I., I heartily concur with the sentiments expressed in the *Madras Mail* leader of the issue of the 28th instant that recommendation No. 6 of this Committee, to the effect that cars should be taxed by horse power, is a great mistake. Every reader of the English motoring journals knows that these papers have never ceased to advocate the abolition of the British horse power tax in favour of a tax on motor fuel. In the current issue of the *Motor*, dated August 3, this subject is adequately dealt with on p. 1187, and I quote this extract from it.

'So long as a horse power tax remains our manufacturers will work under a handicap which does not apply in any other country. The substitution of the petrol tax for the present system would be the greatest benefit to the British industry which any Government could confer, and it might well form the basis of a potential world supremacy in motor car manufacture.'

The idea of a fuel tax is that it represents the best way of making motorists pay for the upkeep of roads *in proportion* to the amount they use them. The horse power tax does not. The damage done to the British Motor Car industry by the horse power tax in Great Britain is inestimable. In the first place it has forced British makers to produce a small car of low h. p. which, whilst it may be suitable for English roads, is generally admitted to be unsuitable for use in any other part of the world outside towns. Thus it is the h. p. tax of Great Britain which has filled India, Australia, South Africa and the colonies in general with American cars, and prevents English cars being bought for use on the Continent. It is true that individual cars of English make have performed wonderful feats such as travelling across Africa and Australia, but the fact remains that most of the farmers, squatters, planters, etc., in these vast commonwealths, men who have to drive over bad roads or no roads at all, own the larger and more powerful American cars because the horse power tax prevents the English manufacturer building a car of size and price to suit such men.

A second objection to the h. p. tax is that a car is taxed whether used often or seldom at the same annual rate. Many a man would own two or three cars at Home if his fuel only were taxed, and the more cars he owns the better for trade. And moreover, many men who now own two or three cars in India will cut down their establishment if a h. p. tax is introduced. More than enough has already been written to prove to the hilt that the horse power tax is an unfair and unsuitable burden on the average English motorist: let not planters gain an unenviable notoriety by asking Government to levy a similar imposition in India.

MOUNTAIN VIEW,

YERCAUD,

August 26, 1926.

Yours, etc.,
E. L. POYSER.

B. Spraying of Coffee

THE EDITOR,
THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

Judging by your Shevaroy District correspondent's most interesting remarks (*vide* page 548 issue of August 14, 1926. Ed.) on spraying of Coffee, they are evidently far more 'go ahead' in this line in the Shevaroyes than we are in Mysore. Will your correspondent publish results of the spraying that has just been done; or could the Managers of the Estates who were endeavouring to spray their whole areas kindly give an account giving results, and how they tackled such a large area? Was Casein used? How did the mixture stand monsoon, and what is the rainfall for the heaviest months?

I have been having of late poor results from spraying with Fish Oil Soap for green bug. Either the fish oil soap is ineffective, or, it has not been properly mixed? Could your correspondent or one of your readers tell me in what proportion and manner they make the mixture? How often do they have to go over the trees to keep green bug in check? Has anybody used any other mixture?

Yours, etc.,
'MYSORE'.

C. Political Representation

THE EDITOR,
THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

May I suggest that all Planters who were in doubt as to the advisability of strengthening our political representation on the Madras Legislative Council read the extremely able ¹ speech made on the subject yesterday by Mr. C. R. T. Congreve? I feel sure it will convince them.

Yours, etc.,
'A. J. A.'

BANGALORE,
August 26, 1926.

¹ (A summary of this speech was given in *The Madras Mail* of August 26, 1926. Ed.)

D. Political Representation

THE EDITOR,
THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

After the discussion on political representation at the Wednesday afternoon meeting of the delegates at Bangalore, it was remarked by more than one that Mr. Congreve stands out as far the most convincing and able speaker now among the planting community; and it is therefore most sincerely to be hoped that he will agree to stand as planting M.L.C. in the forthcoming elections.

Yours, etc.,
'P. A. A.'

COIMBATORE,
August 26, 1926.

**LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.**

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending August 28, 1926
Bank Selling Demand Draft on London

23rd	24th	25th	26th	27th	28th
Holiday.	17 31/32d.	17 31/32d.	17 31/32d.	17 31/32d.	17 31/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea					
Mark	Pkgs.	Price	District	Week ending July 31, 1926	January 1 to July 31, 1926	January 1 to July 31, 1925		
				s. d.	s. d.	s. d.	s. d.	s. d.
(A) TEA (WEEK ENDING JULY 31, 1926)		s. d.	N. India.	1 5.80	1 8.60	1 5.25		
			S. India	**1 5.14	††1 8.57	††1 6.30		
			Ceylon...	1 6.05	1 8.99	1 7.80		
			Java ...	1 2.88	1 4.76	1 0.80		
			Sumatra.	1 3.34	1 6.07	1 4.48		
			Nyassa-land.	Nil.	1 5.93	1 1.50		
(a) Anamallais—			Total ...	*1 5.48	†1 8.32	†1 5.72		
Selaliparai ...	108	1 5½						
Karakundru ...	52	1 5						
Kallyar ...	284	1 4¾						
Shollayar...	232	1 4¾						
(b) Central Travancore								
Twyford ...	40	1 6						
Glenmary ...	141	1 5						
Koliekanam ...	104	1 5						
Caradi Goody ...	100	1 5						
(c) Kanan Devans—								
Kalaar ...	72	1 6½						
Letchmi ...	115	1 6¼						
Guderal ...	162	1 6						
Munnar ...	105	1 6						
(d) Nilgiris—								
Prospect ...	256	1 8¼						
Terramia ...	67	1 6¾						
Glendale ...	129	1 6¼						
Nonsuch ...	99	1 6¼						
(e) Nilgiri-Wynaad—								
Seaforth ...	132	*1 5½						
Barwood ...	105	1 4						
(f) South Travancore—								
Poommudi ...	135	1 4½						
Merchiston ...	83	1 4¼						
Goatfell ...	76	1 4						
(g) Wynaad—								
Fringford ...	66	1 4						
Erramaculla ...	60	1 4						
Elstone ...	40	1 3¾						

(B) COFFEE

London Prices (seven days ending August 10, 1926)

The East Indians offered when auctions were resumed on the 10th attracted keen competition ; and 1st and 2nd sizes respectively fetched up to 168s. and 157s.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, August 31, 1926, was 19¼d.

** Based on 4,570 packages

†† " " 102,922 "

†† " " 105,158 "

* Based on 47,773 packages.

† " " 1,884,634 "

† " " 1,733,415 "

(b) *Précis of Reports on the London Market received on Monday, August 30 and covering the seven days ending Tuesday, August 10 :—*

(1) *Tea.*—Sales were resumed after the Holiday on Monday, August 9; but the prices will not be available until receipt by next Mail of the London Tea Brokers' Association Report for the week ending August 14. Messrs. Sanderson & Co. give the shipments of Southern India Tea to all places as 4,151,491 lbs. against 4,376,356 lbs. in the same month last year. This figure brings the total from January 1, to June 30, 1926 up to 20,977,125 lbs. as against 22,615,748 lbs. during the corresponding period of 1925.

(2) *Rubber.*—The demand from American consumers appreciably slackened when it was announced that the 'cut' of 20 per cent in production had been missed by $\cdot 001d.$; and a drop of about $2d.$ per pound ensued. Later, however, some recovery took place and the 'spot' price on August 10 was about $19d.$

(3) *Coffee.*—As indicated on the previous page, some East Indians fetched very good prices when sales were resumed on August 10. On that date the London Stocks of African, Indian and other kinds respectively were given in bags as 22,304, 13,249, and 87,360 as compared with 33,010, 41,583, and 125,129 on the corresponding date last year.

III. Weekly Rainfall Statement

From Sunday, August 22, 1926, to Saturday, August 28, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	0.11	48.91	49.02	19. Naduvattam	0.08	N.R.	N.R.
2. Kalthuritty.	1.62	80.74	82.36	20. Coonoor ...	0.20	11.85	12.05
3. Tenmalai ...	0.76	86.01	86.77	21. Kotagiri ...	0.58	22.41	22.99
4. Mundakayam.	1.66	103.44	105.10	22. Ootacamund	...	29.75	29.75
5. Peermade ...	1.40	141.22	142.62	23. Yercaud ...	0.54	25.23	25.77
6. Twyford ...	1.63	154.49	156.12	24. Devala ...	4.19	114.80	118.99
7. V'periyar ...	0.16	63.71	63.87	25. Gudalur ...	0.43	64.66	65.09
8. Kalaar ...	3.34	159.40	162.74	26. CALICUT ...	1.86	99.88	101.74
9. Chittuvurrai	0.28	24.91	25.19	27. Kuttiyadi ...	2.74	124.90	127.64
10. BODI'KANUR	N.R.	5.54	N.R.	28. Vayittiri ...	0.70	160.06	160.76
11. COCHIN	0.65	85.93	86.58	29. Manantoddi.	0.41	90.07	90.48
12. Mooply Valley,	1.85	103.81	105.66	30. Billigiris ...	0.48	27.15	27.63
13. Pachaimalai.	1.04	98.23	99.27	31. Sidapur ...	0.05	59.78	59.83
14. Mudis ...	1.12	190.19	191.31	32. Pollibetta ...	0.52	81.86	82.38
15. Nell'pathy...	0.48	77.10	77.58	33. Somwarpett.	0.93	58.16	59.09
16. POLLACHIE.	...	19.89	19.89	34. Ballupete ...	N.R.	52.90	N.R.
17. Manjeri ...	0.66	105.50	106.16	35. MANGALORE	3.29	86.07	89.36
18. Nilambur ...	0.60	98.70	99.30	36. MADRAS ...	2.33	4.77	7.10

W=During the week,

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE

VOL. XXI, NO. 37] SAT., SEPTEMBER 11, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	607	Nights Out ...	613
The late Mr. D. G. Cameron ...	608	U.P.A.S.C. Billiards and Golf.	616
U.P.A.S.I. General Com- mittee Meetings ...	609	The Budding of Rubber ...	617
Benevolent Fund Meeting ...	611	Commercial and Meteoro- logical ...	619

EDITORIAL NOTES

On behalf of their numerous friends amongst our Readers, we tender our hearty congratulations to Mr. and Mrs. J. C. Nicolls; in *Wedding Bells* the sincere hope that their wedding ceremony, which took place at Bangalore on the 29th ultimo, will prove the harbinger of very many years of happy and prosperous married life.

The Annual Report of the Director of Agriculture, Kenya, for the year ended December 31, 1925, reaches us as we go to Press. *Kenyan Coffee and Tea* As regards Coffee it confirms the acreage as on June 30, 1925, at the figure—65,140—which we gave on page 237 of our issue of April 10, 1926. It attributes the drop in the value of exports from £799,420 in 1924 to £723,180 in 1925 to a serious drought in the largest producing areas, which also resulted in a falling off in quality both as regards 'liquoring' and size. Coffee, it is interesting to note, accounted for 31 per cent of the total exports, and is grown by no less than 696, or 40 per cent of the total number, of the European Colonists who own land. The Department throughout the year gave special attention to the suppression of 'Mealy bug,' and is confident that the Pest will soon be brought under control.

The area actually under Tea on June 30, 1925, was only 382 acres; but the Report notes that the future importance of this industry can be gauged from the fact that 43,480 lbs. of tea seed was imported during 1925, and that several influential companies with experience in tea growing elsewhere have commenced to open up tea estates in the Kericho and Limuru Districts, and appear to be fully satisfied that both soil and climate are suitable for the production of high quality tea.

Rubber Planters may be interested in the advice given to their colleagues in Ceylon by Mr. Stockdale at the end of the article on *The Budding of Rubber* which is concluded this week on Page 618.

THE LATE MR. D. G. CAMERON

(COMMUNICATED)

In the death of Mr. D. G. Cameron on August 9, 1926, a well-known figure and a link with the old coffee days has passed away in Travancore. He came to the country in 1872, and landed at Colachel on his way to take up an appointment on Mahendragiri Estate. The Scottish Indian Coffee Company then had a number of coffee places in South Travancore with a coast Office at Colachel to which place the coffee was sent down for curing and shipping. Instead of going up to the Estate, Mr. Cameron was asked to straighten out the company's accounts; and this led to his taking up a mercantile career, and giving up the idea of planting. A few years later he moved on to Quilon and it was here he did such good work. From small beginnings, a large business was built up consisting of Tile Works, Saw Mills and General Estate work. Tile manufacture was entirely unknown in Travancore until introduced by Mr. Cameron; and it has led to the establishment of an industry now giving employment to a large number of people. Through his friendship with practically all the old Planters, the Peermade coffee was sent to Quilon for curing and shipment, and a considerable quantity of estate requirements were landed at Quilon and sent up to the neighbouring estates.

Apart from his established business, Mr. Cameron held for some time contracts for the construction and upkeep of a large number of the roads in Travancore; and we have to thank him for the good work which has undoubtedly been put into them, and made them so much better than the majority of roads found in South India. About 1883 he was asked by the Travancore Government to start a paper mill; and in 1890 a mill was working at Punalur. This enterprise received much thought and hard work, and it was with great regret it had to be abandoned through lack of financial support. He also turned his attention to the Railway from Tinnevely to Quilon; and not only took on a good deal of the contract work, but landed all the railway materials at Quilon and helped to drive the first engine under its own steam from the temporary jetty at Tangacherry up to the present site of the Quilon Railway Station.

After 40 years of hard work, Mr. Cameron sold his business to Messrs. Harrisons & Crosfield, Ltd., and sailed for home in 1912 with a view to taking a rest after his labours. Retirement was not congenial and he returned to India in 1914 and took up planting on his Estate—Mahendragiri—which was his first appointment 42 years previously. By this time all the coffee had gone and only tea remained. The last years of his life were spent as a Tea Planter, and he passed to his rest after 54 years of active life in this country.

He was one of the most charming characters it is possible to meet, and was beloved by all who had the good fortune to know him. He did an endless amount of good in South Travancore where all classes of people regarded him with the greatest esteem. He was a close friend of the late Maharajah and kept up a most interesting correspondence with him for many years. Many an interesting tale has been told by him of the old coffee days, when the life was hard and the old Planters were harder still. Assistants could not get away for week ends on motor bikes in those days; but an annual rally was held and the Planters rode into the coast from many miles around and gave themselves up to a real good time with the officers of the regiment and the few civilians on the coast. With the march of civilization, the conditions of those who now spend their lives in Travancore have improved enormously, and we are indebted for these

to a large extent to the pioneering work that has been done by such fine old men as Mr. D. G. Cameron—men who have not only done good work but have left behind them reputations which reflect on the prestige of our race.

THE U.P.A.S.I. GENERAL COMMITTEE.

Proceedings of a Meeting held at the Mayo Hall, Bangalore, on Monday, August 23, 1926

Present

Mr. R. Fowke	...	...	<i>Chairman.</i>
Capt. E. G. Windle, M.L.C.	...	...	<i>Planting Member.</i>
Mr. J. J. Murphy	...	...	<i>Executive Committee.</i>
Mr. H. Waddington	...	...	<i>Secretary.</i>

and the following

Associations

Represented by

Anamalais	...	Mr. A. C. Cotton.
Central Travancore.	...	Mr. B. P. Tailyour and Mr. R. J. McMullin.
Coorg ...	...	Mr. P. G. Tipping.
Kanen Devans	...	Mr. A. J. Wright and Mr. Hawkins (Substitute.)
Mundakayam	...	Mr. C. L. McLean and Mr. S. N. Ure.
Mysore	...	Mr. M. A. DeWeck.
Nelliampathies	...	Mr. A. Hall.
Nilgiris	...	Mr. G. W. Hollings and Mr. A.K. Weld-Downing (Substitute.)
Nilgiri-Wynaad	...	Mr. J. Aird.
Shevaroy	...	Capt. E. H. A. Travers Drapes.
South Travancore	...	Mr. T. L. Jackson and Mr. F. G. Millar.
West Coast	...	Mr. H. R. Carson-Parker.
Wynaad	...	Mr. B. M. Behr and Mr. I. W. Finlayson.

Last Meeting

The proceedings of the last Meeting which had been published in the *Planters' Chronicle* were taken as read and confirmed.

Membership

Proposed from the Chair—

That the election to Membership of the Association of the Nelliampathy Planters' Association (now in process of incorporation) and of the Agricultural Bureau for Calcium Cyanamide, both of which have been provisionally admitted to membership by the Executive Committee, be confirmed.

Carried.

Recorded that as regards Messrs. Binny & Co. (Madras) the name in the Membership List has been mutated to Binny's Estates, Ltd.

Rules of the U.P.A.S.I.

Proposed from the Chair—

That Rule VI of the U.P.A.S.I. Rules be amended as follows :—

VI. No subject other than those on the published Agenda shall be discussed except with the consent of the Meeting. No original proposition shall be made unless 30 days' notice in the case of an Ordinary Meeting and 14 days' notice in case of a General Committee Meeting stating objects and reasons has been given to the Secretary; except with the consent of the Executive Committee with which a copy of the proposed resolution has been lodged at least two days before the Meeting.

Carried.

U.P.A.S.I. Labour Rules

The Chairman informed the meeting that the Nelliampathy Planters' Association had given notice that it wished a definition of the Nelliampathy Planting District added to Rule XIV of the U.P.A.S.I. Labour Rules, but as this might entail considerable discussion he proposed to postpone the matter until the Annual General Meeting.

U.P.A.S.I. Labour Department Rules

Proposed from the Chair.—

That the amendment to Rule VII(ii) of the U.P.A.S.I. Labour Department Rules passed and brought into force provisionally by the Executive Committee at a meeting held on May 20, be hereby confirmed.

Carried.

European Employees' Provident Fund Rules

The Meeting decided to postpone confirmation of the Rules of the European Employees' Provident Fund until the Annual General Meeting.

Annual General Meeting

The Programme of the order of business at the Annual General Meeting, copies of which were in the hands of all members was considered and approved.

With a vote of thanks to the Chair the proceedings terminated.

H. WADDINGTON,
Secretary.

THE U.P.A.S.I. GENERAL COMMITTEE

Proceedings of a Meeting held at the Mayo Hall, Bangalore, on Thursday,
August 26, 1926.

Present

Mr. R. Fowke *Chairman.*

Postponement

At 10.30 a.m., as the Annual Meeting of the Association was still in progress, the Chairman postponed the Meeting till the close of the Annual Meeting.

At 4 p.m., the Meeting opened, the same members being present as at the last Meeting with the addition of :—

<i>Association</i>			<i>Represented by</i>
Anamalais	...	...	Mr. J. E. Sampson.
Coorg	...	...	Mr. S. P. St. Clare Raymond.
Mysore	...	...	Mr. C. Lake.
Nilgiri-Wynaad	...	...	Mr. G. W. Fulcher.
West Coast	...	...	Mr. H. Walmesley.

Executive Committee

The Executive Committee was ballotted for and the following gentlemen declared elected :—

	<i>Active Member</i>	<i>Member in Waiting</i>
For TEA ...	... A. C. Cotton	... H. L. Pinches.
„ RUBBER ...	... H. J. Walmesley	... C. L. McLean.
„ COFFEE ...	... C. Lake	... P. G. Tipping.

The Chairman declared the Meeting closed.

H. WADDINGTON,
Secretary.

SOUTHERN INDIA PLANTERS' BENEVOLENT FUND

(INCORPORATED)

Report of the Proceedings of the Third Annual General Meeting held at the Mayo Hall,
Bangalore, on August 26, 1926

Present

Mr. R. Fowke	...	...	...	...	Chairman.
Mr. H. Waddington	...	...	...	...	Secretary.

And the following representatives of members in the :—

Anamalais	...	Messrs. A. C. Cotton and J. E. Sampson.
Central Travancore.	„	B. P. Tailyour and McMullin.
Coorg	...	Mr. St. Clare Raymond.
Kanan Devans	...	Messrs. A. J. Wright and J. S. Hawkins.
Mundakayam	...	„ McLean and Ure.
Mysore	...	„ C. Lake and DeWeck.
Nelliampathies	...	Mr. A. Hall.
Nilgiris	...	Messrs. A. K. Weld-Downing and G. W. Hollings.
Niigiri-Wynaad	...	Mr. G. W. Fulcher.
Shevaroy's	...	Capt. E. H. A. Travers Drapes.
South Travancore	...	Messrs. F. G. Millar and T. L. Jackson.
West Coast	...	„ A. R. C. Parker and H. J. Walmesley.
Wynaad	...	„ B. M. Behr and I. W. Finlayson.
U.P.A.S.I.	...	The Chairman.

The proceedings of the last Meeting which were published in the Book of Proceeding for 1925 were taken as read and confirmed.

The Secretary read the following Report :—

BENEVOLENT FUND

The subscriptions and donations during the year ending March 31, 1926 again established a record; and are in excess of the amounts received in any previous twelve months. This result was largely owing to the three donations of Rs. 1,000 each from the Yendayar Estate, the Nenmeny and Redlynch Estates, and the English and Scottish Joint Co-operative Wholesale Society, Ltd. I would draw special attention to the action of the Directors of the Kinalur, Kuttiadi and Eddivanna Rubber Companies under the Agency of Messrs. Peirce Leslie & Co., Ltd., the Mundakayam Valley Rubber Company under the agency of Messrs. Darragh Smail & Co., the Nonsuch Tea Estates, Ltd., under the agency of Messrs. Harrisons and Crosfield, Ltd., which companies at their Annual Meetings passed special grants of Rs. 250 or Rs. 200 each as donations to the Fund. The number of planters supporting the fund is, I regret to report, rather less than in the previous year. Interest on investments amounted to Rs. 3,712-2-4 as compared with Rs. 3,246-13-2 in 1924-25, and Rs. 1,647-2-8 was received as excess of income over expenditure of the Buying Agency; making as you will see from the accounts on the table a total income of Rs. 15,771-14-9.

Although support to the Fund totals to some Rs. 2,700 more than last year, the calls on the Fund have increased in both number and amount exceeding Rs. 10,000, as compared with Rs. 1,050 in the previous year. Many distressing cases have come before the notice of the Executive Committee during last year, which it has tried to meet with justness and due consideration of the wishes of those Associations which forwarded the applications for assistance.

I cannot close this report without a reference to the death of Mr. Morrison. His was one of the first cases taken up by the Fund, and since 1912 it has made a small grant for necessary clothes and the luxury of a pipe of tobacco and occasionally small additions, necessary in the case of an invalid. The real cost of his support however was cheerfully borne by the little Sisters of the Poor of Bangalore. During the whole time I have been Secretary, Mr. G. T. Hall of Bangalore has ungrudgingly superintended the disbursement of our contribution, rendering me the most exact accounts of every penny disbursed, and relieving me of all trouble as to details.

The most useful work, as giving the biggest return to the community as a whole, which the Fund is able to do, is to provide for the education of children who without its help would get no chance in life ; and I know it is with the most sincere regret that District Associations and the Executive Committee agree to any other form of assistance where children are concerned. In my report of last year I mentioned that the Fund was educating two boys and sharing in the cost of education of three other children. I am sorry to have to report that the two boys at Bishop Cottons are the only cases in which the fund is at present interested in the education of children in this country.

H. WADDINGTON,

Secretary.

August 17, 1926.

Mr. Behr raised the point as to whether the names of recipients of assistances should be published in the accounts or elsewhere, he believed no similar fund gave publicity to names in the way that was done in connection with the S.I.P.B.F.

Mr. Waddington said that as a subscriber and member of the Fund he felt he had a right to speak on the matter. This publication of names had always been most distasteful to him and he strongly supported what *Mr. Behr* had said, but the older members of the Fund would remember that a previous Chairman had held equally strong opinions on the question and carried them out by obtaining a resolution that they should be given in full. It was all a matter of whether members would trust their Executive, after all the names would be furnished any member writing and asking for them.

Mr. A. K. Weld-Downing supported the views of *Mr. Behr* on the matter.

Proposed by *Mr. B. M. Behr* and seconded by *Mr. A. K. Weld-Downing* :

That in future the names of recipients of relief be not published.

The resolution was put to the Meeting and carried *nem con.*

The Chairman.—If no other representative of the members has any remark to make regarding the Report, I propose from the Chair :

That the Secretary's Report be adopted.

Carried.

The Chairman :—The accounts are before you and I put it from the Chair :

That the accounts be passed and adopted.

Carried.

Mr. Sampson urged that greater publicity should be given in the *Planters' Chronicle* as to how subscriptions were coming in.

Mr. Walmesley in supporting this said that men did not realize the position. It was certainly so as regards members of his Association but

when he put it before them last year he obtained more support and he hoped in the current year to obtain still more. He said, 'Men are willing but forget.' (Applause).

The Chairman.—If members have nothing further to bring forward, there is only one other matter to be dealt with, we must under the Rules appoint an Executive Committee and I propose :

That the Executive Committee of the U.P.A.S.I., be the Executive Committee of the Southern India Planters' Benevolent Fund with all powers of the General Committee except those of making, altering or repealing By-laws.

The resolution being put to the meeting was carried.

The Chairman.—I now declare the meeting closed.

H. WADDINGTON,
Secretary.

R. FOWKE,
Chairman.

NIGHTS OUT

IN

PLANTERS' WEEK, BANGALORE, 1926

(From a Correspondent)

The Bangalore meeting is one of the planting holidays of the year for the feminine part of the community : the men, of course, poor things are deeply engaged in business meetings, but manage to snatch a certain amount of relaxation *en route*, so to speak. But a week in Bangalore is *some* holiday to the wives and daughters, and they troop in determined to make the most of it. A 200 mile run brought us to the West End Hotel on Saturday, August 21 ; but we were by no means the first arrivals, the Fowkes, Mr. and Mrs. 'Waddy', 'J.J.', the Lakes, Mrs. Walmesley, the Reeds, F. Winterbotham and others being already installed. By the way I must pay a tribute to 'Waddy's' smiling composure and competence with the cares of the meeting in front of him ; and I would add that they were maintained to the end. The Planting Member and 'Auntie' were followed closely by Messrs. Congreve, in his lordly Rolls Royce, Cotton, Sampson, Walmesley, the Carson Parkers, the Airds, the Hollings, the Raymonds, etc.

'C.R.T.' and Sonny said that a dance was being held at the Club that night and that all must go. 'How adorable!' said Auntie ; and so we stepped into the purring Rolls at 9.30 with Mrs. 'Waddy' in our party, Mrs. Sonny having elected to stay at home and play bridge.

The Tank Corps Band was playing divinely when we entered the ballroom and as Sonny said reminded one of the Savoy orpheans.

Rowen, even more benignly smiling than ever, had already taken the floor and was accompanied by Mrs. Rowen in a charming gown of mauve charmeuse and some beads. Mrs. Beau looking very chic in a gown of black taffeta, and dear Beau, were amongst the well-knowns one noticed.

Sauntering into the garden later in the night with the Maclean of Maclean, we took up our seats beneath a tree and whilst enjoying the coolness of the breeze we heard a feminine voice murmur to its partner 'I feel so sorry for these poor planters having to put on "tails" to come to a dance here, I am sure they would be much happier dancing in shorts, poor things.' Wasn't it kind of her ?

Sunday was more or less spent in going to Church, and in greeting the latest arrivals at the Hotel. Johnnie and Mrs., what ! ; Gladys and George

(dear George always so hardworking in the day and so deliciously sentimental and charming at night, no Planters' Week would be complete without him); the Weld Downing family and S.D.; the Patches; the Shaws; P. G. Tipping; B.M. Behr; J. S. Hawkins; and many others.

Monday was a particularly eventful day and night. The opening of the Planters' Conference in state at Mayo Hall is always an important event. A few ladies were present on the dias seated behind their husbands. The Chairman, Mr. R. W. Fowke, debonair in a suit of navy blue serge with a puce tie, opened the proceedings at 2.30. The Honourable the Resident, Mr. S. Pears, was present; also the Planting Member; Col. Walsh, C.M.G., M.C., Director of Organization in India, who had kindly come from Simla especially to tell us about the new A.I.R.O. regulations; the hardworking 'Waddy'; the Scientific Officers; Delegates from the various districts; and many others. I will not go into further details of the meeting which have already appeared in print; but I should like to say that the exhibits of rubber articles sent out by the Rubber Growers' Association surpassed anything of the kind seen before. The ladies were presented with rubber flowers, roses, carnations, and violets in their various colours, which were much appreciated.

On Monday night the B.A.D.C. kindly gave us three sketches at the Club. 'Postal Orders' by Rolland Pertwee, 'Thread O'Scarlet' by J. J. Bell and 'The King's Breakfast' from 'When we were very young' by A. A. Milne. They were all exceedingly well acted; and I especially liked 'The King's Breakfast' a delightful piece of fooling in which Prof. Catterson-Smith as 'King', Mrs. Geary as the 'Queen', and Vera Dalgety as a charming 'dairymaid' played the chief parts. The dancing which followed was great fun; and after some bangers and beer we sauntered home in the Rolls at about sixty miles an hour dropping people here and there including dear Mrs. H.L.P., who is always such a great sport and danced until the early hours on every occasion. Auntie said she would have enjoyed the night air immensely if only Johnnie had alighted on the seat instead of her ankle. What!

On Tuesday afternoon the B.U.S. Club were 'At Home' to the Planters and their wives. Some delicious tea was served in the garden; and we witnessed some excellent tennis by Mrs. Waddy, the young Weld Downings, A. C. Cotton, Major and Mrs. Kemble, Major and Mrs. Shackleton and several others.

On Tuesday night the B.A.D.C. in co-operation with the British Musical Society presented 'Mary Rose' by J. M. Barrie at the B. R. V. Theatre. The planting community were very grateful for being given the opportunity of seeing such a charming play so superbly acted and our hearty thanks are extended to Mrs. Catterson-Smith who produced the play and also took the name part, to Prof. Catterson-Smith who had charge of the lighting effects (by no means the least important part of the show), to Miss N. Flint under whose baton the Orchestra and voices of the B. U. S. were so ably conducted, and to all other members of the company of 'Mary Rose.'

On Wednesday there was a luncheon party at the Residency to which a large number of planters and their wives were invited.

On Wednesday night at the Planters' Ball at the B. U. S. Club, the Honourable the Resident Mr. S. Pears and Mrs. Pears honoured us with their presence. Mr. R. Fowke, Chairman of the U.P.A.S.I. and Mrs. Fowke received the guests of the evening, who consisted largely of members of the Regimental Messes in Bangalore and their wives. Mrs. Pears wore a beautiful gown of black charmeuse and diamante—and long diamond

earrings. Mrs. Fowke wore a gown of beige georgette and gold paillettes, which was greatly admired. I think there were about 350 people present, and we danced until the very early hours to the delightful music of the Tank Corps Band. How St. John Oliver coped with such large numbers as 100 to dinner and 300 to supper on the same night is a positive marvel, and with a cheery countenance he was to be seen dancing most of the dances.

On Thursday afternoon there were Gymkhana Races, a very pleasant little meeting indeed.

On Thursday evening there was a dinner party at the Residency for which many of us received invitations. The West End Hotel management who were always so obliging gave a Dance that night, the funniest of shows. The band consisted of the local Piano tuner and his family. The girls in Pink Organdie over Coffee and the boys ranging in ages from ten upwards played very indifferently at first, and it was owing to the kindness of one Morris of Coorg who helped to ginger up the band a bit with a few encouraging remarks to the young ladies, etc., that what might have been a screaming fiasco was turned into something most amusing.

Mons. Le Noir nearly drove his Hispano Suiza into the ballroom, and brought a donkey which was placed in the middle of the floor. The poor thing could not stand up (someone said it had been given beer to drink) so we had it quickly removed.

On Friday 'J. J.' most generously gave a luncheon party at the West End Hotel to all the planting community. The moment the band started to play (not the band of the previous evening I may add) at about 12.30, dancing started and continued through the meal until 3.30. The luncheon was delicious, fois gras in aspic, duck, pêche melba and iced asparagus, with pommery greno. Bob Kent told Auntie that the liquer brandy was 1865, but Auntie said that conveyd nothing to her as the only date she knew was 1066.

Gladys, whose conversation was as sophisticated as her palate, adored the pêche melba (personally I adored the sprats!) remarking that ladies who live in fast blouses mustn't show bones.

On Friday afternoon at 5 p. m. we were all entertained at a delightful garden party at the Residency. After tea we sauntered into the grounds and watched some tennis and a conjuror, and enjoyed the excellent music of the H. L. I. Band playing the 'The Peer gynt suite.'

On Friday evening the finals of the Billiard Tournament were played off at the West End Hotel resulting in a victory for Nilgiri-Wynaad (R. Fowke and George Fulcher). A dance followed at the Hotel.

Saturday was an eventful day; final shopping expeditions, excursions to Sivasamudram, Gymkhana Races, and a dance in the evening at the Club. The Tank Corps Band played divinely until the very early hours. The Charleston King was not alone in his excentric dancing, he was partnered on several occasions by that expert dancer Vera Dalgety (looking as chic as a water-wagtail), and the Madras Rugger team produced a real Hal Sherman who showed us how the Charleston should be done.

And so we arrived at the end of a delightful week, which was made the more charming by the extreme generosity of the Bangaloreans, and as we trundled back to our various estates on Sunday and Monday, tired but happy, we had visions of what a wonderful life a planter's life could be, if only we could live with all our dear friends of the past week in the same district.

Our last vision was of George and Gladys half way to the Estate, personally conducting a cage of guinea-pigs for their offspring.

To our next merry meeting!

U. P. A. S. I. SPORTS CLUB
Bangalore Conference—August 1926
GOLF AND BILLIARDS RESULTS
THE DEWAR GOLF CUP

(12 hole course)

Bye	{	de Weck (12)	{	St. Raymond	}	Raymond	}	Backhouse
	{	St. Raymond (12)	{					
Downing (12)	{	Tailyour	{					
Tailyour (12)	{		{	Tailyour				
Wood (12)	{	Langley (W.O.)	{					
Langley (7)	{		{					
Magniac (12)	{	Magniac	{		Backhouse	Backhouse		
Mackie (12)	{		{					
Nicolls J. S. (12)	{	Backhouse	{		Backhouse	Backhouse		
Backhouse (7)	{		{					
Bye	{	Turner, A.R. (12)	{	Fulcher	}			
	{	Fulcher (7)	{					

INTER-DISTRICT RUSSIAN BILLIARDS

(HEATS 150 UP—FINAL 200)

Bye	} Coorg	} C. Travancore	} Nil.-Wynaad	} Nilgiri- Wynaad (200/185)	
	} C. Travancore				
Nil.-Wynaad	} Nil.-Wynaad				
S. Travancore	(150/66)	Nil.-Wynaad			
		W. O.			
Kanan Devans	} Scratched				
Mundakayam					
Wynaad	} Wynaad				
West Coast		Wynaad			
		W. O.			
Mysore	} Scratched				
U.P.A.S.I.			Wynaad		
Bye	} Nilgiris	} Nilgiris			
	} Anamalais	(150/96)			

The names of the Entrants and their respective Districts are shown in the following list:—

<i>District</i>	<i>Players</i>
1. Anamallais ...	... C. R. T. Congreve and A. C. Cotton.
2. Central Travancore ...	... B. P. Tailyour and R. J. McMullin.
3. Coorg ...	... J. B. Reid and A. F. Magniac.
4. Kanan Devans ...	... J. S. Hawkins and A. W. Wright.
5. Mysore ...	... C. Lake and H. H. English.
6. Nilgiris ...	... J. Backhouse and A. K. W. Downing.
7. Nil.-Wynaad ...	... G. W. Fulcher and R. Fowke.
8. South Travancore ...	... F. G. Millar and J. A. Stevenson.
9. U. P. A. S. I. ...	... A. H. Macki and F. W. Winterbotham.
10. West Coast ...	... A. R. Turner and G. D. Oliver.
11. Wynaad ...	... B. M. Behr and I. W. Finlayson.

MIXED DOUBLES TENNIS

U.P.A.S.C. vs. UNITED SERVICE CLUB

The Bangalore United Service Club were very kindly At Home to the U.P.A.S.C. on the evening of Friday the 24th. A most interesting Mixed Doubles Tennis Match was held on the occasion, and Hosts beat Guests by 8 matches to 3.

WOODBRIAR ESTATE,
 August 31, 1926.

G. W. FULCHER,
Honorary Secretary.

THE BUDDING OF RUBBER

BY

F. A. STOCKDALE, C.B.E., M.A., F.L.S.,

*Director of Agriculture, Ceylon**(Concluded from page 601, Issue of September 4, 1926)*

YIELDS

The following summary of yields which have been published up to date may be of general interest :—

MALAYA

Kajang Estate.

- (a) *Age.* Of stock 5 years, of bud shoot 4 years.
- (b) *Girth.* 21.66 inches at 17 inches from ground and only 1.17 inches less at 39.37 inches from ground.
- (c) *Mother Trees.* 13 years old.
- (d) *Stocks.* Miscellaneous—not selected seed.
- (e) *Control.* Trees from same stock non-budded.
- (f) *Tapping System.* Half spiral, daily tapping for 5½ weeks followed by rest for same period, then changed to alternate day tapping.

- (g) *Yields.* Clone 1 Average 16.3 grams per tapping.
Mixed Clones 1 and 9 „ 19.9 „ „ „
Control trees „ 5.8 „ „ „
In Clone 1 the highest yielder gave 24.5 grams, and the poorest 9.1 grams per tapping.

In mixed Clones 1 and 9 the highest yielder gave 28.7 grams, and the poorest 12.3 grams per tapping.

In the Control Block the highest yielder gave 12.6 grams and the poorest 2.3 grams per tapping.

Taking 80 trees per acre tapped on 160 days per annum Clone 1 would give 459 lb. per acre per annum. Mixed Clones 1 and 9 would give 561 lb. per acre per annum and the Control would give 163 lb. per acre per annum.

These yields are from 5 year old rubber (4 years budded).

SUMATRA

A.V.R.O.S.

- (a) *Age.* Of stock average 6 years. Of bud shoot average 5½ years.
- (b) *Girth.* Average about 21 inches to 25 inches at 20 inches above union of scion and stock.
- (c) *Mother Trees.* Age not stated.
- (d) *Stocks.* From selected seed.
- (e) *Control Trees or Seedlings.* From same selected seed as the stocks.
- (f) *Tapping System.* Alternate monthly on daily cuts over half the circumference.
- (g) *Yields.* Average yield from seedlings is 8 grams per tree per tapping which, on the basis of 160 tapping days and 80 trees per acre, gives 225 lb. per acre per annum.

Clone 33. Average 14.65 grams per tree per tapping equalling on above basis 413 lb. per acre per annum.

Clone 36. Average 11.66 grams per tree per tapping equalling on above basis 314 lb. per acre per annum.

Clone 50. Average 20.11 grams per tree per tapping equalling on above basis 567 lb. per acre per annum.

Clone 52. Average 12.98 grams per tree per tapping equalling on above basis 366 lb. per acre per annum.

Clone 80. Average 13.04 grams per tree per tapping equalling on above basis 367 lb. per acre per annum.

JAVA.

Malamboo Estate

(a) *Age.* Of stock 5 years, of bud shoot $4\frac{1}{2}$ years.

(b) _____

(c) *Mother Trees.* Average age 9 years at time buds were taken from them.

(d) *Stocks.* Selected seed from trees of good girth measurement.

(e) *Control Trees.* Same seed as stocks on which buds were grafted.

(f) *Tapping System.* Single cut on half circumference.

(g) *Yields.* Expressed in terms of percentage of the average yield of the control trees.

Clone	A.	B.	C.	D.	E.	F.	Control
Percentage	87	138	162	122	195	90	100

Clones A and F are, therefore, poorer yielders than the control cut, B, C, D and E are higher.

Expressed in terms of yield per centimeter of tapping cut :—

Clone	A.	B.	C.	D.	E.	F.	Control
Percentage	101	174	191	157	253	111	100

It is pointed out that the bud shoot is 6 months younger than the control shoot.

CONCLUSIONS

From the above it is clear that Ceylon general budding cannot yet be undertaken with certainty of success. It is not possible by external characters to recognize a high-yielder which will produce offspring of high-yielders. What has to be done on estates is first the selection of a number of high-yielders and the setting apart of some of these to provide bud-wood and of others to provide seed for the stocks. Nurseries from the seed of those reserved for stocks should be planted this year or the seed should be planted out at stake and those trees reserved for buds should be pollarded in order to provide good bud-wood from which to bud the stocks being grown. It has been found that the best results are secured when buds are taken from bud-wood which is the same age as the bark of the stock on to which it is to be bud-grafted. An accurate record of the buddings should be kept in order that definite data will be available as to those combinations which give the most satisfactory results. It is only when the behaviour of mother trees is known as tested by the tapping results that progress on sound lines can be made.

The latest report just received from Sumatra shows that the yields of seedlings and of a mixture of buddings from unproved clones are about the same. The experiment reported on shows that the method of using buddings from unproved mother trees on a large scale should not be applied when laying out a plantation with budded plants. Such experiments should only be laid down by estates on limited acreages in order to secure data on the estates' own land regarding the value of different mother trees for future plantings and budding work. For such experiments at least one half acre of buddings should be planted from each selected tree and the likely mother trees which it is desirable to test should not be less than 20 if the estate contemplates planting out in future years anything in excess of 100 acres of budded rubber.

The Rubber Research Scheme has commenced the development of an experiment station of 50 acres in extent in the Kalutara district for investigation work in the budding and selection of rubber, but estates should not await the results from these experiments. They should lay down experiments of their own and advice as to how these experiments should be designed to yield the information required can be secured from the officers of the Department of Agriculture or of the Rubber Research Scheme.

The Tropical Agriculturist.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending September 4, 1926
Bank Selling Demand Draft on London

30th	31st	1st	2nd	3rd	4th
Holiday.	17 31/32d.	17 31/32d.	17 31/32d.	17 15/16d.	17 15/16d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending August 14, 1926	January 1 to August 14, 1926	January 1 to August 14, 1925
(A) TEA (WEEK ENDING AUGUST 14, 1926)				s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 5·86	1 8·53	1 5·18
Kallyar ...	227	1 5 $\frac{1}{4}$	S. India	**1 5·54	††1 8·36	††1 6·13
Thoni Mudi ...	215	1 5 $\frac{1}{4}$	Ceylon...	1 6·45	1 8·88	1 7·72
Ani Erangel ...	204	1 5 $\frac{1}{4}$	Java ...	1 3·30	1 4·68	1 0·84
Shollayar...	342	1 5	Sumatra.	1 4·49	1 5·87	1 4·29
			Nyassa-land.	1 1·70	1 5·88	1 1·41
			Total ...	*1 5·69	†1 8·22	†1 5·65
(b) Central Travancore			(B) COFFEE			
Twyford and Ashley...	63	1 6	London Prices (seven days ending August 17, 1926)			
Koliekanam ...	63	1 5 $\frac{3}{4}$	Most of the East Indians offered were withdrawn as Buyers would not pay the prices asked by Sellers ; but some Coorgs imported 18 months ago sold at 168/6, 160/-, and 150/- for Peaberry, Bold, and Second Size respectively.			
Caradi Goody ...	100	1 5 $\frac{1}{4}$				
Munjamailly ...	99	1 5 $\frac{1}{4}$				
(c) Kanan Devans—			(C) RUBBER			
Yellapatty ...	145	1 6 $\frac{3}{4}$	The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, September 7, 1926, was 20d.			
Sevenmally ...	150	1 6 $\frac{1}{2}$				
Letchmi ...	96	1 6 $\frac{1}{2}$				
Kanniamallay ...	68	1 6 $\frac{1}{2}$				
(d) Mysore—						
Kadur ...	67	1 4 $\frac{1}{4}$				
(e) Nilgiris—						
Ibex ...	98	1 8				
Nonsuch ...	135	1 7 $\frac{1}{4}$				
Glendale ...	75	1 6 $\frac{3}{4}$				
(f) South Travancore—						
Poonmudi ...	117	1 4 $\frac{3}{4}$				

** Based on 3,624 packages

†† „ „ 106,546 „

†† „ „ 111,827 „

* Based on 74,329 packages.

† „ „ 1,958,963 „

† „ „ 1,810,705 „

(b) *Précis of Reports on the London Market received on Monday, September 6 and covering the seven days ending Tuesday, August 17 :—*

(1) *Tea.*—Rates all round were dearer than before the Holidays by from $\frac{1}{4}d.$ to $\frac{1}{2}d.$ per pound. The South Indian average, as shown on the previous page, is $\cdot 4d.$ above the figure— $17\cdot 14d.$ —which we published last week. The Indian Tea Association estimates the crop to the end of July 1926 at $138\frac{3}{4}$ million pounds; as compared with $136\frac{1}{2}$ million pounds and 115 million pounds for the corresponding periods of 1925 and 1924. Bonded stocks in the United Kingdom on July 31 were 148 million pounds, as against 162 million pounds on the same date in 1925. The imports of tea during January-July inclusive were almost 225 million pounds which is 9 million pounds less than the figure for the corresponding period of 1925.

(2) *Rubber.*—The market was slightly firmer; and the 'spot' price on the 17th was about $19\frac{1}{2}d.$ as against $19d.$ on the 10th. Business was done for October-December at between $19d.$ and $20\frac{3}{4}d.$ Stocks increased from 27,972 tons to 29,313 tons.

(3) *Coffee.*—On August 17th the London stocks of African, Indian and other kinds respectively were given in bags as 20,583, 12,711 and 84,882 as against 32,123, 40,520 and 125,311 on the corresponding date last year. Messrs. T. H. Allen and Company report that supplies of good coffee are so small that anything with quality will certainly meet with strong demand until arrivals become heavier; and consequently it is quite possible that the near future will see an advance in price. Enquiries are being received from the Continent for East Indian Coffee 'to arrive'.

III. Weekly Rainfall Statement

From Sunday, August 29, 1926, to Saturday, September 4, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	0·05	49·02	49·07	19. Naduvattam	N.R.	N.R.	N.R.
2. Kalthuritty.	0·09	82·36	82·45	20. Coonoor ...	0·12	12·05	12·17
3. Tenmalai ...	0·23	86·77	87·00	21. Kotagiri ...	0·91	22·99	23·90
4. Mundakayam.	0·55	105·10	105·65	22. Ootacamund	...	29·75	29·75
5. Peermade ...	0·97	142·62	143·59	23. Yercaud ...	0·98	25·77	26·75
6. Twyford ...	1·33	156·12	157·45	24. Devala ...	0·22	118·99	119·21
7. V'periyar ...	...	63·87	63·87	25. Gudalur ...	0·64	65·09	65·73
8. Kalaar ...	1·66	162·74	164·40	26. CALICUT ...	0·46	101·74	102·20
9. Chittuvurrai	0·57	25·19	25·76	27. Kuttiyadi ...	1·15	127·64	128·79
10. BODI'KANUR	0·25	N.R.	N.R.	28. Vayittiri ...	0·21	160·76	160·97
11. COCHIN	0·71	86·58	87·29	29. Manantoddi.	1·05	90·48	91·53
12. Mooply Valley,	1·10	105·66	106·76	30. Billigiris ...	1·51	27·63	29·14
13. Pachaimalai.	0·32	99·27	99·59	31. Sidapur ...	0·35	59·83	60·18
14. Mudis ...	2·14	191·31	193·45	32. Pollibetta ...	0·47	82·38	82·85
15. Nell'pathy...	...	77·58	77·58	33. Somwarpett.	0·58	59·09	59·67
16. POLLACHIE.	0·06	19·89	19·95	34. Ballupete ...	0·50	53·95	54·45
17. Manjeri ...	0·04	106·16	106·20	35. MANGALORE	1·64	89·36	91·00
18. Nilambur ...	0·59	99·30	99·89	36. MADRAS ...	0·84	7·10	7·94

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 38] SAT., SEPTEMBER 18, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	621	Proposed Road Fund ...	625
U.P.A.S.I. Sports Club ...	623	Artificial Farm Yard Manure...	626
All India Rugger Tournament.	624	The Rubber Specialist's July	
Letters to the Editor—		Report ...	633
Political Representation ...	625	Commercial and Meteorological.	635

EDITORIAL NOTES

Apologia The Secretary of the U.P.A.S.I. regrets that, through an inadvertence, the name of the Planting Member, Capt. E. G. Windle, was omitted from the List, published on page 611 of our last issue, of those who were present at the recent Third Annual General Meeting of the Southern India Planters' Benevolent Fund.

Act I of 1903 We learn that the President of the Planters' Labour Act Amendment Committee has decided to hold a meeting of that Committee at the Secretariat, Madras, on Friday the 1st proximo at noon.

Political Representation We notice that Thursday night's *The Hindu* announces that the Nominations of Candidates for Seats at the forthcoming General Elections will take place on the 4th of October ; and that the 8th idem has been fixed for the scrutiny of the Nominations made on the former date.

Mexico's Coffee Exports The following table indicates Mexican Coffee exports for 1924 and 1925 :—

—	1924	1925	—	1924	1925
Germany ...	10,887,060	18,652,799	Carried forward.	38,283,278	51,554,596
Canada ...	98,766	95,217	Great Britain ...	480,482	589,318
Cuba ...	183,864	502,706	Guatemala ...	916,357	15,926
Spain ...	642,709	993,210	Netherlands ...	59,414	870,261
United States ...	26,093,895	30,440,980	Italy ...	11,045	104,315
France ...	376,984	869,684	Other Countries.	961	16,147
	38,283,278	51,554,596	Total ...	39,751,537	53,150,563

The Royal Commission on Agriculture The Royal Commission on Agriculture, according to the latest advice regarding their South Indian Programme, will be in Bangalore from the 11th to 13th, in Coimbatore from the 16th to 20th, and in Madras from the 23rd to 30th November, 1926,

On page 633 of this issue, Mr. Ashplant supplements in an interesting manner the remarks regarding Urea as a Secondary Leaf Fall ameliorant which he made on pages 5 *et seq.* of his Annual Report for 1925-26. Copies of that Report were sent out this week from the U.P.A.S.I. Offices to the District Associations concerned for distribution to the Superintendents of South Indian Rubber Estates.

The General Scientific Officer's, Mr. Munro's, report on the experiments which he has been conducting in connection with the manufacture of an adequate substitute for Farm Yard Manure seems particularly opportune at this juncture when the subject is very much to the fore. In England, actuated by the increasing scarcity of stable manure, the famous Rothamstead Agricultural Experimental Station has been endeavouring to determine the best methods for converting waste vegetable matter into a good rich Fertilizer; and recent activities on the same lines at Coimbatore and at the Pasteur Institute at Coonoor seem to indicate that there is something in Farm Yard Manure and its synthesized vegetable substitute which the exclusive use of Chemical manure cannot adequately provide; for plants treated with decayed vegetable matter have not only grown better but also furnished qualitatively better food. Mr. Munro's report will be found on page 626.

We have received this week from the Department of Commercial Intelligence and Statistics, India, Volume II of *Agricultural Statistics of India*, 1923-24, which gives estimates *inter alia* of the acreage under Tea and Coffee in the Native States. There seems to be nothing in the volume to indicate whether the period to which it relates expired on March 31, 1924, or on June 30, 1924; but we believe we have seen it stated elsewhere that Indian Agricultural Statistics are compiled for 'July-June' years and not for the financial years April-March. The Report is so belated that ordinarily we would probably have refrained from commenting upon it at all; but it contains figures at apparently such striking variance with those already published by the same Department that we feel the discrepancies in question should, at any rate, be pointed out; even though lack of time has precluded us from yet tracing, or endeavouring to trace, the errors to their source. A reference to Page 117 of the issue of *The Planting Directory of Southern India* which was published last October will show that 'Indian Coffee Statistics 1923-24' gave the Coffee acreages in Mysore, Cochin and Travancore respectively as 69,607, 2,374 and 886. The corresponding figures shown on Page 48 of the volume under review are 97,585, 5,555 and nil. The increase of 28,000 odd acres as regards the Mysore acreage is explicable if 'Agricultural Statistics' has taken Coorg as part of Mysore; but we have found nothing in the volume to indicate that this conjecture is correct.

As regards Tea 'Agricultural Statistics' agrees with 'Indian Tea Statistics' in placing the Travancore acreage at 49,275; but it places the Mysore acreage (given in 'Tea Statistics' as nil) at 392.

The Manager of the Madras Branch of the Mercantile Bank of India, Ltd., informs us that his Directors have declared an Interim Dividend at the rate of 16 per cent per annum less Income Tax for the half year which ended on June 30, 1926.

U.P.A.S.I. SPORTS CLUB

Proceedings of a Committee Meeting held at the West End Hotel, Bangalore,
on August 22, 1926, and completed at a further meeting held on the
morning of August 27, 1926

Present

Mr. B. M. Behr (*President*), Messrs. J. S. Hawkins, H. H. English and
G. W. Fulcher (*Honorary Secretary*).

The following Districts were represented at the meeting held on
August 22 :—

West Coast	...	...	...	by Mr. Walmesley.
Coorg	...	...	...	„ Mr. Reid.
Nilgiris	...	...	...	„ Mr. Weld Downing.
C. Travancore	...	...	...	„ Mr. McMullin.
U.P.A.S.I.	...	...	...	„ Mr. Fowke.

ACCOUNTS

Accounts were tabled for the year ending March 31, 1926, and the
present financial position of the Club was put before the meeting and
discussed.

CLUB BADGE

The design selected by the Committee was adopted. Blazers complete
will be procurable at a fixed rate from the firm in Madras which offers the
best terms. The name of the firm will be intimated to members immedi-
ately the contract has been made.

VENUE OF MEET, 1927

This matter was strongly discussed preparatory to settlement at the
Upasi General Meeting timed for August 25, at which it was finally
decided that the 'Week' be held at Ootacamund in the second half of
February.

RUGBY FOOTBALL

Mr. Stockwell was appointed 'Skipper' for the coming season.

Messrs. Behr, Hawkins, English and Stockwell were appointed to select
the Planters' team for the Madras Tournament commencing on October 4.

CRICKET

It was decided to send a Planters' XI to play the M.C.C. in Madras on
October 2 and 3.

PLANTERS' 'WEEK', 1927

As the tennis tournaments at the next Planters' 'Week' to be held at
Ootacamund in the second half of February will be played at Woodside in-
stead of on Golf Club courts as formerly, certain expenditure on screens and
re-surfacing old courts will be necessary. This expenditure was passed.

Mr. Langley's proposal of a West Coast team coming up to play the
Planters at Cricket during the 'Week' was very favourably received, and
it was proposed that this match be played immediately previous to the two
day fixture with the M.C.C.

A vote of thanks to Mr. Behr ended the meetings.

G. W. FULCHER,
Honorary Secretary.

B. M. BEHR,
President.

U.P.A.S.I. SPORTS CLUB

NOTICE
TO THE
CRICKET AND RUGGER TEAMS VISITING
MADRAS NEXT MONTH

The Railway Companies are again granting return tickets at single fare to the U.P.A.S.C. teams visiting Madras next month for the Cricket match against M.C.C. on October 2 and 3 and for the Rugger tournament which commences on October 4.

Each selected player should AT THE VERY EARLIEST POSSIBLE OPPORTUNITY advise the undersigned at what station, and if possible also on what date, he intends to entrain for Madras. The failure of several players to adopt this course last year caused considerable complications in the final adjustment of the Travelling Expenses Account.

Every endeavour will be made to see that the players who have duly given me the intimation referred to above receive Concession Fare Orders before they leave their estates ; but in the event of any contretemps (such as, for example, non-receipt of—or refusal by Station Masters to honour—the Concession Fare Orders) the player concerned, should as soon as possible, advise me ; stating the station at which he entrained, and the number, date and cost of the ticket which he bought. A copy of such advice should also be forwarded to the Secretary of the U.P.A.S.I. who will eventually have to make the application to the Railway Companies for any rebates which may be due.

The Members of both teams should arrive in Madras at latest on the morning of October 1.

WOODBRIAR ESTATE,
September 11, 1926.

G. W. FULCHER,
Honorary Secretary.

ALL INDIA RUGBY FOOTBALL TOURNAMENT

October 1926

THE DRAW

U.P.A.S.I. Sports Club (Planters) The Lancashire Fusiliers	} Sat., Oct. 2nd Calcutta	} *Tues., Oct. 5th	} Thur., Oct. 7th	} Sat., Oct. 9th
	} Ceylon The Welch Regi- ment	} Tues., Oct. 5th	} Thur., Oct. 7th	} Sat., Oct. 9th
	} Madras Gymn. 'A'	} Sun., Oct. 3rd	} Wed., Oct. 6th	} Sat., Oct. 9th
Bangalore The Gloucester Regt.	} Bombay *Sat., Oct. 2nd	} Mon., Oct. 4th		

The two matches marked * will be played on the ground of the Lancashire Fusiliers : All the others will be played on the Gymkhana Ground. Each game will commence at 5 p.m. sharp.

When entering, the Gloucester Regiment intimated that they might possibly have to scratch ; and in that case the Gymkhana 2nd XV will take their place.

AMUSEMENTS

The following have been arranged during Rugger 'Week':—

Sunday.—9.30 p.m. Lancashire Fusiliers' Band Concert, Museum Theatre.

Tuesday.—House Dinner and Dance, Adyar Club

Wednesday.—9.30 p.m. F.I.N.S. Dance at Victoria Hall with Royal Tank Corps Band.

Thursday.—6.30/7.30 p.m. Royal Tank Corps Band at Gymkhana.

9.30 p.m. M.D.S. Variety Show, Museum Theatre.

Friday.—9.30 p.m. Fancy Dress Dance, Adyar Club, with Royal Tank Corps Band.

Saturday.—8.30 p.m. Rugger Dinner, Madras Club.

MADRAS,
September 14, 1926.

R. B. CARRICK,
Honorary Secretary 'Rugger',
Madras Gymkhana Club.

LETTERS TO THE EDITOR

*(The Planters' Chronicle does not hold itself responsible for its
Correspondents' views.)*

A. Political Representation

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

The two letters on this subject, in your issue of the 4th instant, will have been read with interest, and, almost certainly, general approval.

It is essential that the Planting Community shall obtain the best possible representation in the Council, and no one is more fitted to undertake these duties than Mr. Congreve.

It is imperative that Mr. Congreve shall be asked to stand for election, as Planting M. L. C., at the next elections: and I feel sure that, having been asked, he will agree to do so.

COIMBATORE,
September 10, 1926.

Yours, etc.,
S. E. J.

B. The Proposed Road Fund

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

In his letter to the *Planters' Chronicle* of September 4, Mr. Poyser suggests a fuel tax as being preferable to the horse-power tax recommended by the Road Fund Committee. He goes to some length to show the harm done to British Trade by the horse-power tax in Great Britain, and how it has forced makers to produce a small low-power car. This, however, has nothing to do with our question in India: the introduction of the tax out here would in fact, as far as British Trade is concerned, have the reverse effect as these low-power English cars he speaks about would then find favour in India too.

SIDAPUR,
September 9, 1926.

Yours, etc.,
C. E. RICKETTS.

ARTIFICIAL FARM YARD MANURE

BY

D. G. MUNRO, B. Sc.

GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.

Artificial Farm Yard Manure experiments have been carried out for a number of years on the Experimental Stations and on Estates with various materials. All experiments were carried out in consultation with the Government Agricultural Chemist by whom all analyses were done. The first set of experiments were conducted at Sidapur in 1922 while the Government Agricultural Chemist carried out similar experiments at Coimbatore. The material used in both cases was paddy straw 1,500 lbs. and 0.7 per cent Calcium Cyanamide as starter. The manures rotted well and a really good stuff resembling Farm Yard Manure was obtained in both cases. The loss of nitrogen at Sidapur was 29.5 per cent and 13.66 per cent at Coimbatore.

The method followed at Sidapur was as follows :—

Experiment began :—2nd February, 1922.

1,400 lbs. Paddy Straw stacked 10' × 6' × 6'.

Straw piled loosely and at every foot 5 watering cans of water sprinkled over the layer ; 30 cans of water being used altogether.

When the stack was complete, 10 cans of water were added from the top to thoroughly moisten it and 56 lbs. of Calcium Cyanamide were spread on the top in the two applications ; and, after each, 10 cans of water were added to wash this into the stack.

Total water added 60 cans=160 gallons.

Daily watering was carried out as follows :—

7 a. m.	...	3 cans	} 12 cans = 32 gallons.
Noon	...	6 cans	
5 p. m.	...	3 cans	

One pound of dry straw was sent for analysis and represented the material started with.

Climatic conditions dry and hot with drying winds. Stack in open and full sun.

5th day	...	Fermentations began in the middle of the heap with development of heat. Colour change noticed.
6th day	...	Straw black in centre of heap.
9th	„	Stack reduced in height to 4 feet. Very hot.
10th	„	Fumes arising from the centre.
13th	„	Smell of ammonia noticed.
14th	„	Heap fuming.
16th	„	Watering reduced to 16 gallons per day.
17th	„	Colour yellowish black : smell of ammonia strong. Wet in centre.
19th	„	Height of stack reduced to 3 feet getting compressed. Great heat still developed.
31st	„	Still hot. Stuff in centre rotting and stinking.
32nd	„	Watering stopped.
36th	„	Stuff mixed and sampled.

Water added :—

Initial watering	...	160 gallons.
Daily watering	...	152 gallons.

Total	...	312 gallons.
-------	-----	--------------

Weight of final material	3,402 lbs. 14 ozs.
--------------------------	--------------------

Weight of sample sent	2 lbs. 4 ozs.
-----------------------	---------------

Throughout the sides of the stack were dry, as they dried out soon after watering. Fermentation does not appear to have reached the sides to any extent.

The Government Agricultural Chemist's report is as follows :—

'The sample of analysis was found to contain 78·65 per cent moisture and 0·335 per cent nitrogen. As the heap at the time of sampling weighed 3403 lbs. the total amount of nitrogen at the end of the experiment was 11·4 lbs.

'The total amount of nitrogen at the beginning of the experiment was:—

		lbs.
In straw	...	6·3
In Nitrolim	...	9·9
Total	...	16·2

'There was therefore a loss during the experiment of 4·78 lbs. or 29·5 per cent of the original nitrogen.

'The straw was not so much rotted as was expected, and different methods will have to be tried. In view of the high temperature in this country it is possible it may be desirable to reduce the amount of soluble nitrogen added. The Farm Manager's note would appear to indicate a 'too rapid formation of Ammonium Carbonate.'

In view of the results of the 1922 experiments, it was decided to carry on some experiments in pits in order to try and slow down the rate of fermentation and avoid such big losses of nitrogen. The results of experiments in 1923 are as follows :—Lemon grass was used and Calcium Cyanamide as starter.

	Percentage loss Nitrogen.	Percentage loss dry matter.
Mr. J. J. Murphy's Estate (Yendayar, Mundakayam), with dry weeds and grass and nitrolim as starter. Heap on surface	40·97	35·23
Mr. J. R. Vincent's Estates (Kuttikal and Nenmeney) Lemon grass from which oil has been distilled, starter nitrolim	37·96	60·52 (very high)
<i>Peermade</i> :—Wild lemon grass and nitrolim. Heap on surface	54·94	71·23 (abnormal)
Pit	57·2	50·79
Heap on surface. Wild lemon grass and lantana in equal proportions	42·0	65·5
<i>Tenmalai</i> :—Lantana and nitrolim. Heap on surface	41·50	26·20

It may be noted that the heap on Yendayar had a thatched roof over it, while on Kuttikal there was no roof. As the rainfall was high (141.5 inches in five months) there was probably a considerable amount of seepage and loss of nitrogen from this source.

In experiments carried out at Coimbatore in the same year the loss of nitrogen from the pits was less in every case than from the heaps, but at Tenmalai it was slightly more. The losses of nitrogen and air dry material at Peermade and Tenmalai are also larger than was found at Coimbatore : showing that fermentation had gone further.

Coimbatore results are shown below :—

	per cent.
The losses of nitrogen from surface heaps ...	26.46
The losses of nitrogen from pits ...	16.34
The loss of dry matter in the surface heaps ...	36.46
The loss of dry matter in pits ...	27.33

In all these experiments the losses of nitrogen was still very high, and it was thought that some of the nitrogen losses might be due to portion of the liquid seeping into the soil and carrying some nitrogen with it. It was also decided to reduce the amount of starter used in order to try and fix the exact amount that could be usefully employed. The amount of starter was therefore reduced from 100 lbs. per ton to 50 lbs.

In 1924, experiments at Peermade were carried on on pit and heap systems. Details of experiments are as follows :—

1. SURFACE HEAP SYSTEM :
 - { Started on April 7, 1924.
 - { Closed on October 3, 1924.
 - Quantity of air dry lemon grass taken for experiment ... 1,750 pounds.
 - Nitrolim added ... 39.1 pounds (at 50 lbs. per ton of grass).
 - Water used for experiment at commencement ... 50 rose cans or 137½ gallons.
 - Dimension of the stack ... 10' × 6' × 6' or 360 c. ft.
 - Total quantity of water used including the 50 gallons used at commencement ... 481½ gallons.
 - Dimension when the stuff was unstacked ... 9' 4" × 6' × 1' 9" or 98 c. ft.
 - Total quantity of stuff obtained ... 2664 pounds.
2. PIT SYSTEM :
 - { Started on April 7, 1924.
 - { Closed on October 4, 1924.
 - Quantity of air dry grass taken to start the experiment ... 1,750 lbs.
 - Nitrolim added ... 39.1 pounds.
 - Water used while starting the experiment ... 50 rose cans or 137½ gallons.
 - Dimensions of the stack ... 10' × 5½' × 5' or 275 c. ft.
 - Total quantity of water used until the hot season and the water used at stacking ... 120 rose cans or 467½ gallons.
 - Dimensions of the stuff when removed ... 10' × 5½' × 3' or 165 c. ft.
 - Total quantity of stuff obtained ... 3,420 pounds.

Fermentation started on the fifth day of the experiment, and continued till the end of June in the first experiment. During the heavy rains, there was no warmth in either of the stacks. From about the middle of August, the one under the pit system again began to ferment, and the stuff was quite warm even when it was removed while the other one had stopped all decaying. The latter was well rotten throughout except a little on the surface. The stuff was jet black in colour. The stuff under the Surface Heap System had not decayed uniformly and the sides and the top were quite dry.

The big difference in weight in the second experiment (Pit system) is due partly to the soil particles deposited within the pit during the heavy rains—when the shed over it was blown down by the wind and rain.

The pit system manure was decidedly better than the other and looked very like cattle manure.

Analyses and remarks are as follows :

ANALYSES :				Pit system.	Heap system.
				%	%
Moisture	...	...	...	73.03	78.39
Loss on ignition	...	...	...	13.53	14.68
Insoluble mineral matter	...	...	...	7.81	4.31
Soluble mineral matter	...	...	...	5.63	2.62
Total				100.00	100.00
Nitrogen	...	...	...	0.30	0.22
Phos. Acid (P_2O_5)	Total	...	...	0.095	0.073
	Citrate soluble.	...	...
	Water soluble.	...	...
Potash (K_2O)	...	...	...	0.047	0.034
Lime (CaO).	...	...	...

REMARKS :

The insoluble matter (of which the 'Pit' manure contains more) is mostly sand. Eliminating this and the moisture in the two samples, the values for organic matter and nitrogen calculated on the residual dry matter are

			Pit.	Heap.
Organic matter	...	...	70.63	84.87
Nitrogen	...	...	1.57	1.27

which point to the 'Pit' manure having reached a more advanced stage of decomposition. On the other hand neither appears to have reached the limit of rotting, the Nitrogen value (on dry basis) for well rotted manure should be about 2 per cent. This is also evident from the still fibrous conditions of the samples.

The time for this experiment was just about 6 months.

In 1925 experiments were carried out both at Peermade and Tenmalai. A pukka floor was built for the heap system in order to avoid any loss by seepage.

PEERMADE :

A ton of dry lemon grass was taken for each of the experiments. The grass obtained for the experiment was still young and not old or matured. Though air-dried for sometime the grass still contained a considerable amount of moisture when the experiment was started—owing to dew and drizzling rains then experienced. The stuff was loosely spread layer after layer and sprinkled with Nitrolim at 50 pounds per ton and sprinkled with water every layer.

The water used was just the quantity required to allow the nitrolim to form into a solution to soak through every bit of grass. Fifty rose cans of water were used to each heap, when the stacking was finished. The fermentation started on the third evening in both stacks; and at the end of the period the stuff was fairly well decomposed in both, although it was more uniform in the pit.

HEAP SYSTEM :

} Started May 7, 1925.
 } Closed October 26, 1925.

Quantity of lemon grass taken for the experiment	...	2,240 pounds.
Nitrolim added	...	50 pounds.
Water used at the commencement.		50 rose cans or 137½ gallons.
Dimensions of the stack	...	10' × 8' × 6' or 480 c. ft.
Total quantity of water used	...	218 rose cans or 599½ gallons.
Dimensions of the stack when removed	...	10' × 6' × 2' or 120 c. ft.
Total quantity of stuff obtained	...	3,260 pounds.

PIT SYSTEM :

} Started on May 7, 1925.
 } Closed on October 26, 1925.

Quantity of dry lemon grass taken for the experiment	...	2,240 pounds.
Nitrolim added	...	50 pounds.
Water used at the commencement.		50 rose cans or 137½ gallons.
Dimensions of the stack	...	10' × 8' × 6' or 480 c. ft.
Total quantity of water used	...	183 rose cans or 503¼ gallons.
Dimension of the stack when removed	...	10' × 6' × 1¼' or 105 c. ft.
Total quantity of stuff obtained...		3,673 pounds.

TENMALAI :

Artificial Farm Yard Manure on Pukka Floor

1. Place	...	Tenmalai-Travancore.
2. Date of commencement	...	Stacking started on December 9, 1924.
3. Material used	...	Stacking finished December 10, 1924. Forest grass. The grass has flowered and stalks 10 to 12 feet long. fairly thick were used.
4. Weight of material	...	One ton. Partly dry.
5. Analysis of material	...	Original moisture—9.0%. Total nitrogen. —0.4432%.

6. Name of starter	...	Nitrolim.
7. Quantity of starter	...	50 lbs. (50 lbs. per ton.)
8. Quantity of water at different times.		1001·6 gallons.
9. Approximate cost of manure.		Rs. 16-13-6 or Rs. 17-13-3 for a ton of manure.
10. Experiment finished on	...	February 10, 1926.
11. Manure obtained	...	2116 lbs.

PIT SYSTEM :

1. Place	...	Tenmalai-Travancore.
2. Date of commencement	...	Stacking began December 9, 1924. Finished on December 10, 1924.
3. Material Used	...	Forest grass partly air dried. The grass has flowered and stalks are 10 to 12 feet long and fairly thick.
4. Weight of material	...	Two tons grass.
5. Analysis of grass	...	Original moisture 9·0 per cent. Total nitrogen. 0·4432%.
6. Name of starter	...	Nitrolim.
7. Quantity of starter	...	100 lbs. (50 lbs. per ton of grass).
8. Quantity of water at different times	...	1,870 gallons.
9. Approximate cost of the manure.		Rs. 31-14-0 or Rs. 16-4-4 a ton of manure.
10. Experiment finished on	...	February 10, 1926.
11. Manure obtained...	...	4,389 lbs.

The Government Agricultural Chemist's analyses and remarks on the finished product are shown below :

PEERMADE

	A.F.Y. Manure. Heap System	A.F.Y. Manure. Pit System	Lemon grass for A.F.Y.M.
1. Moisture	4·11	5·125	2·09
2. Phosphoric acid. (P_2O_5)	0·72	0·80	0·195
3. Potash. (K_2O)	0·28	0·19	0·01
4. Nitrogen	1·26	3·30	1·83
5. Per cent loss of nitrogen	75·99	19·87	...
6. Per cent loss of dry matter	58·52	47·68	...
7. Original moisture	75·06	71·81	12·3

TENMALAI

					Artificial F. Y. Manure. Pit System	Artificial F. Y. Manure. Pukka Floor System
Moisture	...	...	...	...	2.86	5.09
Loss on ignition	..	...	...	...	35.07	50.54
Insoluble mineral matter	...	...	...	...	44.04	24.25
Soluble mineral matter	...	...	...	...	18.03	20.12
Total					100.00	100.00
Nitrogen	...	...	...	...	0.87	1.52
Phosphoric acid. (P_2O_5)	...	...	...	...	0.18	0.33
Potash (K_2O)	...	...	...	...	0.79	1.42
Original moisture	...	...	...	...	66.35	70.24
Per cent loss of nitrogen	...	...	...	...	61.32	42.97
Per cent loss of dry matter	...	...	...	...	62.32	68.84

The loss of nitrogen in the four experiments conducted in the two places is in agreement with the results obtained in the pot experiments conducted in this Laboratory. Not only almost all the nitrogen added in the form of starter is lost, but in some cases even a portion of the nitrogen of the basic material also disappears. This loss is further accentuated when fermentation is allowed to proceed beyond a certain limit, i.e., when the loss in dry matter exceeds 50 per cent of the original dry matter, and this loss of nitrogen is not strictly proportional to the loss of dry matter. This fact is observable by comparing Peermade figures, in which loss from heap which has exceeded the limit of fermentation is more than three times the loss from pit which is very near the fermentation limit.

At Tenmalai both systems have exceeded the limit and hence the loss is considerable.

On scrutinizing last year's results obtained at Peermade and Tenmalai, the following points may be noted:—

The pit system at Peermade has given much the best results with a nitrogen content of 3.3%, a loss of nitrogen of 19.87% loss of dry matter 47.68%. The amount of water used was 503½ gallons for the whole period of 5 months and 20 days. From 1 ton of air dry material lemon grass with 50 lbs. starter (Nitrolim) the outturn of manure was 3673 lbs. i.e., 1 ton 12¾ cwts.

The Heap System gave much poorer results. Nitrogen content is 1.26% and loss of nitrogen amounted to 75.99% and loss of dry matter 58.52%.

The total quantity of water used was 599½ gallons nearly 20% more than was used in the pit system. The outturn of manure was 3,260 lbs. or 1 ton 9 cwts. from 1 ton dry material.

Turning to Tenmalai results, it is found that results are much poorer than at Peermade even with a pukka floor in the heap system. The experiment was carried on for nearly 14 months and the amount of water used was

1,000 gallons per ton of material on the pukka floor heap system and 935 gallons per ton in the pit system.

In this case the content of nitrogen in the pukka floor heap system is higher than in the pit system being 1.52% as against 0.87%. The nitrogen losses amount to 42.97% and 61.32% respectively while the loss of dry matter amounts to 68.84% in the heap system and 62.32% in the pit system.

The outturn of manure in this case was actually less than was put in as dry material viz., 2,194 lbs. per ton of dry material in the pit system and 2,116 lbs. per ton in the heap system. In Peermade experiments the outturn was 1 ton 12½ cwts. in the pit system and 1 ton 9 cwts. in the heap system.

This shows that at Tenmalai, fermentation had proceeded much too far and the losses of organic matter were much too great. The amount of water used was too high and probably caused considerable loss of nitrogen by seeping.

(To be concluded next week.)

REPORT OF THE RUBBER SPECIALIST, U.P.A.S.I. FOR JULY 1926

The Annual Report of the Station dealing with the work done up to July 18 was written up during July, and should be shortly in the hands of planters. Details of the experiments with Urea will be found in the Annual Report, but for those estates that may decide upon a programme of manuring, the following additional note may be useful.

Synthetic Urea as an Ameliorant against Secondary Leaf Fall.—The plot that was manured with Urea as well as sprayed, still looks wonderfully well, only a little of the leaf put on after the spraying having been lost. With regard to the unsprayed Urea treated plot some further loss of leaf chiefly from the lower branches has occurred on this. The amount of leaf still carried by the trees is however considerable, and there is no doubt whatever but that the Urea has markedly improved their resistance to *Phytophthora* damage.

Secondary Leaf Fall disease is too bad in South India to be fought successfully with manuring alone; but Urea promises to be a useful auxiliary to spraying, and is recommended as a tonic in addition to this measure on all backward and badly devitalized rubber. Areas on which bark renewal has become unsatisfactory should certainly be manured as well as sprayed, and it would be worth the while of estates in future to set aside a sum annually for manuring. It is hoped that all estates will try from 100 to 300 acres at least with Urea manure in November and December next. For permanent results an annual course of Urea manuring extending over the next three or four years is advised. The mode of employment and the quantities* recommended are:

(a) Backward or badly devitalized rubber.

Treatment: 1½ cwts. Urea per acre for a few years plus spraying.

* The quantities suggested are the very minimum. More should be given if possible. Too much must not be expected from a single application. It will take a few years to restore the vitality of the trees.

(b) Average rubber.

Treatment: $\frac{3}{4}$ to 1 cwt. Urea per acre plus Spraying.

(c) Immature rubber.

Treatment: $\frac{3}{4}$ to 1 cwt. Urea per acre plus Spraying.

(d) Areas which owing to their great distance from water or inaccessibility cannot well be sprayed.

Treatment: 2 cwts. Urea per acre.

Method of Application.—There is no need to dig or fork the Urea in. It will suffice to broadcast it over the soil, taking care that all lumps are crushed. Where the areas to be manured are covered with ordinary weeds or bushy legumes like Boga, clean weeding must be undertaken beforehand. On areas covered with leguminous creepers like Vigna, it would be a pity to destroy the cover altogether. The course recommended in such cases is to scrape all the Vigna back to narrow 3 ft. contour lines, broadcasting the Urea in the clean spaces between. The manure should be kept well away from the edges of the Vigna rows.

Experience shows that the undergrowth very rapidly poaches on soluble manures like Urea leaving little for the tree, so the precautions mentioned are very necessary.

Time of Application.—The idea of applying the Urea in November is in order that it may be built up into the new foliage put on after the wintering. An earlier application, or two small applications per year, one in April and the other about November may possibly give better results in this country, but pending information on this point November is suggested as the best month.

Further Note on Urea.—Urea, or Carbamide $\text{CO}(\text{NH}_2)_2$ is, as is well known, the chief constituent of urine. A healthy human adult excretes about one ounce of Urea every 24 hours. Urea is the most concentrated of all nitrogenous manures, containing 47 per cent nitrogen, which is three times the quantity of nitrogen contained in Sodium Nitrate. According to the only quotation received, its cost should work out at slightly less than that of Sodium Nitrate. Apart from its greater effectiveness on rubber, Urea has the following advantages:—

1. It does not wash out of the soil in wet districts to the same extent as Sodium Nitrate, nor does an excess make heavy soil sticky like the latter manure. Urea has in fact, no harmful effects at all on the soil, there being no soils on which it would be unsuitable.

2. It does not remove lime from the soil like Sulphate of Ammonia.

3. It mixes with practically every fertilizer, thus saving much trouble when composite manures have to be made up.

4. In virtue of its high concentration transport charges per unit of nitrogen are lower.

A disadvantage of Urea resulting from its high concentration, and the small amounts needed is the difficulty of applying it evenly. This difficulty is encountered more particularly with European farm crops, but it may also be met with when bushy plantation crops are manured. The broadcasting method suggested will probably be good enough for rubber, but for some tropical crops it might be better to dissolve the Urea in a little water and spray in with a garden syringe.

H. ASHPLANT,
A.R.C.S.

LAVENDER'S HOTEL, BANGALORE. Food, Comfort, Cleanliness,
Guaranteed.

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending September 11, 1926
Bank Selling Demand Draft on London

6th	7th	8th	9th	10th	11th
17 15/16d.	17 15/16d.	17 15/16d.	17 15/16d.	17 15/16d.	Holiday.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending August 21, 1926	January 1 to August 21, 1926	January 1 to August 21, 1925
(A) TEA (WEEK ENDING AUGUST 21, 1926)				s. d.	s. d.	s. d.
		s. d.	N. India.	1 6·14	1 8·46	1 5·08
			S. India	**1 5·59	††1 8·26	††1 6·04
(a) Anamallais—			Ceylon...	1 6·83	1 8·78	1 7·64
Periakaramalai ...	227	1 6½	Java ...	1 2·83	1 4·61	1 0·80
Nulla Mudi ...	165	1 6	Sumatra.	1 3·24	1 5·39	1 4·22
High Forest ...	82	1 5¾	Nyassa-land.	1 3·96	1 5·85	1 1·11
Ani Erangel ...	244	1 4				
(b) Central Travancore			Total ...	*1 5·97	†1 8·14	†1 5·57
Glenmary ...	58	1 5¾				
Stagbrook ...	216	1 5½				
Caradi Goody ...	180	1 5½				
Twyford and Ashley...	190	1 5½				
(c) Kanan Devans—						
Chockanad ...	109	1 7				
Kalaar ...	84	1 7				
Kanniamallay ...	69	1 7				
Yellapatti ...	137	1 6¾				
(d) Mundakayam—						
Orkaden ...	120	1 4¾				
Yendayar ...	246	1 4½				
(e) Nilgiris—						
Nonsuch ...	144	1 8½	Nilgiris—	bgs. s. d.	Grades.	
Prospect ...	120	1 8½	C. S. T. J. I.			
Woodlands ...	72	1 8½	Mailoor ...	62 154 8		Extra, 1,2,3 'P.B. & T.'
Ibex Lodge ...	110	1 8				
(f) Nilgiri-Wynaad—						
Devarashola ...	192	*1 6¾				
Seaforth ...	125	1 5¾				
(g) South Travancore—						
Poonmudi ...	88	1 5½				
Braemore ...	79	1 4¾				
Invercauld ...	54	1 4½				
(h) Wynaad—						
Erramaculla ...	160	1 4¾				
Fringford ...	47	1 4½				
Elstone ...	40	1 4¾				
Chulika ...	61	1 3				

(B) COFFEE

London Prices (seven days ending August 24, 1926)

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, September 14, 1926, was 19¾d.

** Based on 5,722 packages.

†† " " 112,268 "

†† " " 115,365 "

* Based on 75,756 packages.

† " " 2,034,719 "

† " " 1,881,059 "

(d) *Précis of Reports on the London Market received on Monday, September 13, and covering the seven days ending Tuesday, August 24 :—*

(1) *Tea.*—The selection on offer from South India realized prices which were fully firm at the rates which obtained during the previous week, and the South Indian average price recorded on the previous page shows a fractional advance of $\cdot 05d$. The Bonded stocks in the United Kingdom on July 31 were 148,207,000 lbs. as against 162,286,000 lbs. and 119,143,000 lbs. respectively on the corresponding dates of 1925 and 1924. It is understood that the Northern Indian crop this year is even greater than that which disturbed the market in 1925; and hence it appears quite possible that unless the current season terminates as abruptly as the previous one did, the addition of stocks during the next few months may be disconcertingly large.

(2) *Rubber.*—Stocks increased by 365 tons to 29,678 tons, and the market was slightly firmer at about $19\frac{3}{4}d$., with $1d$. premium on forward sales for delivery from October to the end of the year.

(3) *Coffee.*—On August 24th the London stocks of African, Indian and other kinds respectively were given in bags as 19,548, 12,479 and 82,884 as against 31,468, 39,145 and 124,833 on the corresponding date last year. The price realized by a Nilgiri parcel is shown on the previous page.

III. Weekly Rainfall Statement

From Sunday, September 5, 1926, to Saturday, September 11, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	5.24	49.07	54.31	19. Naduvattam	3.77	N.R.	N.R.
2. Kalthuritty.	6.95	82.45	89.40	20. Coonoor ...	2.97	12.17	15.14
3. Tenmalai ...	4.05	87.00	91.05	21. Kotagiri ...	3.15	23.90	27.05
4. Mundakayam.	10.18	105.65	115.83	22. Ootacamund	2.39	29.75	32.14
5. Peermade ...	4.95	143.59	148.54	23. Yercaud ...	2.81	26.75	29.56
6. Twyford ...	5.68	157.45	163.13	24. Devala ...	1.49	119.21	120.70
7. V'periyar ...	5.45	63.87	69.32	25. Gudalur ...	2.14	65.73	67.87
8. Kalaar ...	3.77	164.40	168.17	26. CALICUT ...	1.35	102.20	103.55
9. Chittuvurrai	3.60	25.76	29.36	27. Kuttiyadi ...	2.25	128.79	131.04
10. BODI'KANUR	0.96	N.R.	N.R.	28. Vayittiri ...	2.82	100.97	163.79
11. COCHIN	2.70	87.29	89.99	29. Manantoddi.	2.20	91.53	93.73
12. Mooply Valley,	3.17	106.76	109.93	30. Billigiris ...	5.43	29.14	34.57
13. Pachaimalai.	4.94	99.59	104.53	31. Sidapur ...	3.49	60.18	63.67
14. Mudis ...	6.25	193.45	199.70	32. Pollibetta ...	3.42	82.85	86.27
15. Nell'pathy...	2.19	77.58	79.77	33. Somwarpett.	2.97	59.67	62.64
16. POLLACHIE.	0.28	19.95	20.23	34. Ballupete ...	3.68	54.45	58.13
17. Manjeri ...	4.25	106.20	110.45	35. MANGALORE	1.81	91.00	92.81
18. Nilambur ...	1.78	99.89	101.67	36. MADRAS ...	0.61	7.94	8.55

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 39] SAT., SEPTEMBER 25, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	637	Tea Exports 1896-1925 ...	649
Political Representation ...	640	Exports of Coffee, Rubber and	
Malaria Prevention ...	641	Tea ...	650
Synthetic Farm Yard Manure. ...	645	Commercial and Meteorological. ...	651
Unpruned Tea ...	647		

EDITORIAL NOTES

The Honorary Secretary of the U.P.A.S.I. Sports Club advises us that the following members are proceeding to Madras in connection with the Cricket Match against the Madras Cricket Club on October 2nd and 3rd. The XI will be selected after arrival in Madras :—

U.P.A.S.I. Sports Club
W. J. Dixson (Captain); G. W. Fulcher; H. H. English; E. A. Cowdrey; F. A. Caryll; J. F. Sprott; E. M. Nixon; R. H. B. Harper; J. C. Fraser; M. C. deCourcy; R. D. Oliver; T. G. Stockwell; and —Page.

17th Century
Tea

The Tea and Coffee Trade Journal reproduces the following copy of a Tea Dealer's bill bearing the date 1784 (the year in which Dr. Johnson died) :—

' Mr. Brown,

Bought of George Roberts, grocer and tea dealer.				£	s	d
1 lb.	Fine Congou tea	...	...	0	6	8
1 lb.	Fine spk. 1 $\frac{1}{2}$ Single	...	...	0	8	0
14 lb.	Loaf sugar, at 8d. lb.	...	...	0	9	4
$\frac{1}{4}$ lb.	Supr. fine Hyson, at 16s.	...	...	0	4	0
$\frac{1}{4}$ lb.	Fine Souchong, at 10s.	...	...	0	2	6
4 lb.	Mt. Sugar, at 5d. lb.	...	...	0	1	8
				1 12 2		

Received the same time, S. Roberts.'

We announced in our Editorial Notes last week that it was reported that the reception of nominations and the scrutiny of nominations had been fixed for respectively the 4th and 8th proxos.; and a Press Communique issued by the Government of Madras Law (Legislative—Elections) Department under date Fort St. George, September 18, 1926, confirms the Report and announces that the elections for both the Legislative Council and the Legislative Assembly are to be held on November 8, 1926. In this connection, The Returning Officer of The Planting Constituency, is publishing the following Notice which will be 'released' at his office on Monday next;—

NOTICE

Whereas the Planting Constituency of the Madras Legislative Council has been called upon by notification to elect a member on or before November 30, 1926, I. H. Waddington, the Returning Officer of the said constituency, do hereby give the following :—

PUBLIC NOTICE

- (i) The number of persons to be elected is one.
- (ii) Nomination papers may be delivered to the undersigned at the offices of the U.P.A.S.I., Post Box 155, Madras. They should be presented between 11 a.m. and 3 p.m. on or before Monday, October 4, 1926.
- (iii) Forms of nomination paper may be obtained at the offices of the person above mentioned between the hours of 10 a.m. and 4 p.m. from September 27, 1926, to October 1, 1926, inclusive and also between 10 a.m. to 1 p.m. on October 2, 1926.
- (iv) The nomination papers will be taken up for scrutiny at 11 a.m. on October 8, 1926, at the offices of the U.P.A.S.I.
- (v) In the event of the election being contested, the poll will take place on November 8, 1926, between the hours of 11 a.m. and 4 p.m. with an interval of rest between 1 p.m. and 2 p.m.

SEPTEMBER 25, 1926,
U.P.A.S.I. Office, Madras.

H. WADDINGTON,
Returning Officer of Constituency.

Those of our Readers who still follow Lord Willingdon's career with interest will note with satisfaction that the recent elections in Canada have given him a Government which, though it does not command an absolute majority, is, at any rate, infinitely stronger than its predecessor ; to outvote whose 117 adherents the 100 Conservatives had only to obtain the support of 18 of the 28 Progressives, Independents and Labourites. The Liberals proper command 4 votes less than the number required to give them an absolute majority ; but there can be no doubt that the deficit will, in practice, be made good by the Liberal Progressives who have won 13 seats. The result is, of course, a great triumph for the Liberal Leader, Mr. Mackenzie King ; but all our Readers, whatever be the colour of their politics, will be glad that Viscount Willingdon is ensured of a stable Administration as he enters upon his new charge.

Mr. Meighen the Leader of the Conservative party and five of his colleagues in the Cabinet were defeated in the Elections, whereas no Liberal Ex Minister lost his seat ; so that it would appear that the Star which is in the ascendant in the Canadian Political Heavens at present is that of the Liberal Agriculturists who are opposed to the high protectionist tariffs for which the manufacturers generally stand. The following table shows the actual number of votes which each party obtained :—

1. Liberals	...	119
2. Conservatives	...	91
3. Progressives...	...	17
4. Liberal Progressives	...	13
5. Independents	...	2
6. Labourites	...	3

245

We reproduce elsewhere from an old copy of *The Times of Malaya* the report of a lecture delivered by Dr. Black at the Ipoh Town Hall on measures designed to counteract the ravages of the Lady Anopheles; who (as so many of our Readers know to their cost) zealously makes it her business to see that no solitary isolated victim of Malaria is left to suffer alone. The Gentleman Anopheles is, we believe, a *gentleman*, in that *he* does not go round puncturing people's skins and quaffing their blood. He may of course thirst for it; but, if so, Nature has presumably failed to endow him with a proboscis adapted, as his wife's is, to the satisfaction of his desires. It is perhaps worth nothing that the presence of the Lady Anopheles does not always indicate Malaria—Finland and parts of Canada are, we believe, notable cases in point—; because she cannot evolve the malarial parasite on her own, but is merely a 'Carrier' who has to obtain it from some 'human' in whose blood it already is. This fact is at present a matter of some concern in England; for if the Female Anopheles pays a visit there now it will find thousands of returned soldiers who have Malaria in their blood and who would therefore afford her a supply of the parasite which she so lavishly gifts to all who cross her path.

It will be noticed that Dr. Black's lecture on pages 641 *et seq.* lays stress on the importance of anti-malarial Oiling Mixtures for which he gives various recipes. Incidentally we have just been informed that one enterprising Eastern House—whose advertisement appears on page ix of this issue is now stocking an anti-malarial 'ready-for-use' preparation which seems to have achieved extraordinarily efficacious results amongst malarial-ridden Labour Forces in The Straits and which is at the present moment being utilized successfully here in South India by several prominent Planters on the West Coast.

Mr. H. W. Roy Bertrand, Chairman of the Kalutara District Planters' Association, and Mr. C. E. A. Dias of Colombo give some interesting first-hand information regarding Javan and Sumatran Budded Rubber in *The Times of Ceylon* of September 15. These Gentlemen spent ten days in Java and ten days in Sumatra investigating the actual position on behalf of various interested parties in Ceylon. As a result of their trip they have been forced to the conclusion that Ceylon has lost eight valuable years or in other words two filial generations during which the most vigorous selection might have been made. The Dutch, they report, have achieved undoubted success in their efforts to ensure that in future all their estates shall be composed exclusively of high-yielders, and practically all planting is now being done with either proved buds or selected seeds—which latter phrase connotes not the mongrel varieties which often pass under that name in Ceylon; but seed which by actual proof of yield has shown a large measure of ability to reproduce its high-yielding type. The Medan Proef Station for instance has a second filial generation coming into bearing from high-yielding mothers; the first generation having been proved, and the pollinization of each generation having been scientifically controlled. In addition to the work done at the Central Proef Stations; each estate Superintendent visited was found to be spending large sums of money in testing out mother trees, and establishing a pure line of seeds. Several clones of remarkably high yield were seen: one of about half an acre of four year old trees was giving in the first year of budding an out turn which worked out at 1,824 lbs. per acre per annum; while another, double the size, consisting of seven year old trees, was giving a yield which worked out at 1,235 lbs. per acre per annum.

POLITICAL REPRESENTATION

BY

CAPT. E. G. WINDLE, M. L. C.

Arising from the attacks on planters by political agitators, several of our members urged that these attacks should be met by 'strong political representation.' Mr. Congreve emphasized this at the Bangalore meeting : when urging that our present political representation was weak, and needed strengthening by another European (owing to bad reporting he was made to say that the 'representative' was weak, a mistake which the Chairman wrote to the *Madras Mail* to correct). A short explanation of the position as regards such representation seems called for. At present we have one vote in Council, and the expenses of the Planting Member are met by some Rs. 1,500 annually. Considering our numbers, we are not likely to be allowed another representative, though we might, as proposed by Mr. Congreve, share one with other bodies of Europeans on paying some Rs. 12,000 per annum. But the truth is that planting subjects are practically not discussed in the Legislative Council ; at any rate, during the time I have been Planting Member. But, you may say, what about all these allegations against planters and Mr. Saldanha's questions in Council ? Any allegations or charges made outside the Council, however true they are, cannot be brought up in Council ; they can only be dealt with in the papers, as I have done exhaustively with every charge made. As to Mr. Saldanha's questions, I must explain that all questions have to be sent in seven days before a session. The Member of Government within those department it comes, answers it, and the reply is printed underneath the question, and each member of Council gets the printed list on the day allotted for it. But, the number of questions being very great, only a limited number called starred questions, are open to discussion, presumably those of *prima facie* importance ; and, as one hour is the limit of time allowed for questions, it generally happens that many even of the starred questions are shut out. I have gone into this explanation to show that, although a question is technically put in the Council, unless it is of general importance there can be no discussion, and the matter has most probably never been mentioned at all. Such is the fate of the majority of Mr. Saldanha's questions on all subjects. It may seem that a Planting Member can do little ; but I think it will be recognized that a member, who consistently attends and votes for all sound measures, is likely to have his requests considered and, if possible, met, when he does put them forward. He is acquainted with Ministers and the Secretaries to Government, and by showing a constant interest in the work of the Council is likely to make friends amongst its members who will more or less follow his lead. That, I take it, is the real and main use of a Planting Member ; at any rate, to start with.

A word or two about the amendment of Act 1 of 1903. This subject came up through a proposal of Mr. Saldanha's, couched in the most ferocious terms, to amend this Act. The Home Member of Government appointed a Committee to consider the matter, on which we were represented, but nothing definite occurred at the first meeting. Circumstances, however, now indicate that there is a probability of the Act being repealed. It is possible that we have ourselves to thank for this to some extent, as only two Districts asked for the Act to be applied to them ; but as the Government of India's policy is to do away with penal clauses (in spite of their illogical grant to Coorg of an Act, including these, recently) it is evident that we shall in the future only have a civil remedy for all breaches of contract.

MALARIA PREVENTION

BY

DR. A. H. BLACK

Oiling Measures Described

We reproduce from an old copy of *The Times of Malaya* the following verbatim report of an interesting lecture delivered by Dr. A. H. Black at the Ipoh Town Hall:—

As Oiling Measures will be so frequently referred to in these lectures, it might be as well to consider them now before mentioning other anti-malarial measures. As before stated, your vote is not unlimited; you must therefore at first centralize your oiling in the most malarious district, and oil all those places where Malaria carrying mosquitoes are found to be breeding. Until you have satisfactorily dealt with these places, you should not attempt to oil other mosquito breeding places. Do not try to oil swamps, but drain them and oil the drains. The object of oiling is to destroy mosquito larvæ before they turn into the adult fly. Doubt has frequently been expressed as to the efficacy of oiling running streams. If properly done oiling destroys the larvæ in streams. That this is so is found by experience, and, even if the larvæ are only made sick by the oil, it is found that they go to the bottom, and cannot rise to take air. Therefore they become suffocated and die.

BY SPRAYING

The spray is the most efficient and suitable method of applying the oil. Various makes of spray are on the market. There is the Four Oaks Spray and the Automatic Holder Harriden Spray. The latter is sold by Messrs. Harrisons and Crosfield, and is perhaps the best known. With the exception of the hose there should be no rubber in the working parts of the spray. Sometimes rubber diaphragm pumps are to be met with, but these are quite unsuitable as the rubber quickly perishes.

Various mixtures of oil have been recommended from time to time. Dr. Wellington has recommended one part of liquid fuel to one part of paraffin of the cheapest brand. In Ipoh we are using two parts of liquid fuel to one part of paraffin at present. Solar Oil with sufficient liquid fuel to darken it a little has been tried and recommended by some, also a mixture of fifty parts of solar oil, ten parts of liquid fuel and four parts of paraffin.

The addition of a half per cent of crude genuine castor oil facilitates the spread of the oil film.

Defects and leakages in the sprayer must be watched for; as a bad film, and a waste of oil may result. It is not infrequent that one sees a sprayer leaking at some joint with the result that fifty per cent of the oil is wasted. The nozzles frequently get blocked and a bad spray, or rather a stream of oil, results. A good pressure of oil must be kept in the sprayer or a bad spray results also. The spraying coolie must be taught to keep his spray nozzles clear and to keep a good pressure of the air in the retainer. The oil must be well mixed or a bad film occurs.

WHERE LARVAE HIDE

Particular attention must be paid to the oiling of the edges of streams and pools. At the edges small pockets are found which are favourite places for larvæ. These must not be missed. Seepage at the edges and wet

patches must receive attention wherever found. The coolies and tindals must be trained to be on the look out for these places. Tindals and coolies must become thoroughly acquainted with all the wet places in their district; which district, in Mosquito Destruction Board areas, may cover several square miles. To know every wet place, large and small, also places which are periodically wet, and sometimes dry, takes considerable time and experience. Considerable trouble is required to train tindals and coolies and to make them familiar with their district, if good results are desired.

It is a fatal mistake to continually lose your coolies, and to put new ones on to oiling measures. You must make your men contented and give them the same favourable treatment and privileges as elsewhere; or they will leave you and the result will be disastrous to the success of your oiling measures.

It is a most shortsighted policy to ignore this fact. Moreover the task of the oiling coolie is not a light one; for he has to carry on his back, for the greater part of the day, three gallons of oil.

The coolie should always walk at a smart pace when oiling. The coolie who walks slowly in a casual manner wastes, or rather uses fifty per cent more oil than is necessary. If the spray is fine a satisfactory film will result although the coolie walks at a fairly quick pace.

WASTING OIL

Complaints are frequently made as to the large amount of oil expended on estates in proportion to the area oiled. The commonest causes of this are, lack of supervision, the casual manner in which the coolie walks, a leaking sprayer and, though it may sound incredible, oiling dry places and grass. I have seen this occur. If the coolie is oiling a dry drain with pockets of water here and there, the spray should be turned off until these pockets are reached. Reliable tindals should accompany oiling gangs or some person to supervise and instruct.

Oiling coolies are generally given an allowance of soap (say $\frac{1}{2}$ a bar) and ginglyl-oil 8 ounces per coolie per month, to prevent bad effects of mineral oil on the skin.

When possible the coolie should walk in the bed of the stream or drain while oiling. When oiling running streams, commence from below and walk against the current that is to say in the opposite direction to that in which the water is flowing; and when the head of a ravine, stream or drain is reached spray a little extra oil there.

A good oil film spreads evenly and a play of colours may be seen on the surface of the water when the light strikes it in the proper direction. A bad oil film is blotchy, patches of liquid fuel go floating down the stream. There will be found usually, something wrong with the nozzle, lack of sufficient pressure in the retainer, or a bad mixture in these cases.

If oiling is being done in an efficient manner, the vegetation at the edges of drains, streams and pools will be found in time to become brown and dead, due to some oil falling upon it; for, as before mentioned, the edges must be oiled, as it is here that the larvæ are to be found.

All weeds, grass, sticks, leaves, etc., should be cleared from the water and from the edges, as the larvæ stick to them. Masses of water weed should be cleared from pools, as larvæ breed in the middle of these weeds, and the oil cannot reach the larvæ. These obstructions also prevent the oil film from spreading, and reaching all larvæ. It must be remembered, as before stated, that places may be alternatively wet or dry according to the

season. Tindals and coolies should look out for such places. Patchy oiling is bad—that is to say spraying a little here and there indiscriminately in one area or section, and then in another section or area.

AN ORGANIZED CAMPAIGN

You must oil all the breeding places of Malaria carrying mosquitoes in one area or section before you go to another. You must carry out an organized campaign in one district or area before you commence in another. Do not forget that the mosquito flies at least half a mile. Therefore, if you leave places unoiled, which you will do if your oiling is patchy, the result with regard to the health of that district or area may be unsatisfactory.

Submerged bundles are not a satisfactory method of oiling. Though the oil immediately on the surface of the bundle may escape, that in the inside does not, or to a small extent only. Try it and see! It is a lazy way of doing anti-malarial work. It is like wanting something for nothing. It is not efficient, and the same remarks apply to submerged bundles as to drip cans.

Drip cans are not satisfactory for the following reasons:—

The current in the centre of the stream is the stronger and all the oil may be borne down the centre of the stream.

Drops falling on the water do not make so good a film as a fine spray nor does the oil spread as well.

The tendency of the oil is to be carried away by the swiftest part of the stream, missing the pockets and holes at the edges of the bank. There is a risk of the oil floating down in patches and not in a continuous film, parafin also evaporates, the same applies to all the more volatile oils.

A drip can might be satisfactory in a narrow drain with perpendicular edges of concrete or other material.

On the other hand a spray can be applied directly where it is required, and the film is continuous and more certain.

The grass should be cut at the edges of streams for the reasons before mentioned.

Before leaving the subject of oiling, I may mention that most sprayers are fitted with double nozzles. If the stream is narrow one nozzle may suffice; and a blind cap is screwed on the nozzle not in use. If the stream is at all wide both nozzles will be required.

If the stream is very wide both edges will have to be oiled separately, one coolie on each side.

The spray, if properly formed, is fan shaped; therefore, the higher the nozzle is raised the wider the film of oil on the surface of the water. Moreover a spray falling on the water from a height forms a better film than when the nozzle is held close down near the surface.

DRAINS

Gentlemen, at a previous lecture a brief reference was made to sub-soil drainage. The pipes used for sub-soil drainage are made of earthenware and sometimes of concrete. There is a difference of opinion as to the durability of concrete pipes, but this I think depends upon the quality of the concrete used, and the proportion and the material with which it is mixed and possibly the acidity of the soil.

Sub-soil pipes in this country are where possible laid 4 to 6 ft. below the surface of the ground. The pipes are as a rule one foot long, and have no spigot and socket joints. They vary in diameter from four to

ten or more inches. The ends of each pipe are plain. They are laid end to end in the trench, and covered with two coconut palm leaves, one on top of the other or with small stones, but the latter is expensive and the trench is then filled in with soil. The fall allowed is about one in a hundred to one in two hundred and less fall than this is not advisable. A 'T' piece is inserted at intervals of about every chain of the drain. From the leg of the 'T' branch pipes are laid connecting with the main drain. The 'T' is not a right angle but the leg of the 'T' goes off at an acute angle, and points in the direction of the flow of the main drain, the branches giving a herring bone appearance. The distance between the 'T' pieces and also the size of the pipe will depend upon the nature of the ground and the amount of water to be dealt with. The pipes should be laid evenly, the end of one pipe coinciding with the next. There should be no waviness either in the vertical or horizontal planes, but the pipes should be in a true gradient.

The main drain, or in the case of pipes if they are used for the main drain, into which the branch pipes discharge, must be proportionately larger in order to cope with the amount of water received from all the branch drain pipes. If the amount of seepage is small, four inch pipes will usually suffice for the contour drains and their branches. The prime cost of four inch pipes is about six cents per foot, of six inch about eight cents per foot, and of eight inch about ten cents per foot.

SEEPAGE

There are occasions when a contour drain will not cut off localized seepages or springs before they appear on the surface, and this will be found to be due to the water rising through a crack or hole in a vertical direction from below through an impermeable or semi-permeable stratum. The seepage or springs previously mentioned were assumed to be moving in a more or less horizontal direction which is usual. The cure for seepage or springs travelling upwards in a vertical direction is to dig a small well over the crack or hole where the water appears, fill it with stones, and to connect the well by means of a 'T' piece as before mentioned. In this case the arms of the 'T' will be vertical and the leg of the 'T' horizontal. The open end of the vertical pipe may be covered with a lid.

A main drain, in order to receive branch subsoil drains, should, if possible, be at least 5 to 6 ft. deep. If the main drain is an open one allowance must be made for a certain amount of soil being deposited at the bottom of the drain, and which might cover the amount of the branch subsoil pipe discharging into the drain.

In those cases where open drains are liable to become filled with soil washed down from higher ground more quickly than they can economically and conveniently be cleaned out, it is better sometimes to subsoil the main drain if practicable. Or the main drain can be constructed in the manner to be described later in order that it may the better scour itself. If the main drain is a shallow stream which cannot be kept at a sufficient depth to receive branch subsoil piped drains or it cannot be subsoil piped or converted into an open concrete drain, it may be necessary to make both the contour and branch drains open drains also and to oil them weekly.

IN A RAVINE

If the main drain, or stream, especially in a ravine has normally a sufficiently small flow of water to allow of its being converted into a subsoil drain by means of pipes, the depression over the subsoil pipes left after

they have been buried and covered over, should be turfed over or covered with stones in such a manner that when surface storm water, which the pipes cannot temporarily cope with, rushes over the surface of the depression, it does not wash away the surface soil and expose the pipes buried below.

To test a subsoil pipe in order to ascertain whether the quality is satisfactory, hold it horizontally at the level of the chin over soft turf or grass and drop it on its side. If satisfactory, it should not break.

When long lengths of subsoil pipe are laid it is a wise measure to insert inspection chambers at intervals, so that you can spot lengths where the drain at some future date may get blocked and out of order by observing the flow of water in the inspection chambers.

ARTIFICIAL FARM YARD MANURE

BY

D. G. MUNRO, B. Sc.

GENERAL SCIENTIFIC OFFICER, U.P.A.S.I.

(Concluded from page 633, issue of September 18, 1926)

Taking the results as a whole the two main facts which emerge are :—

1. Too much starter should not be used.
2. The rate of fermentation should be controlled.

(1) Even with the reduction in amount of starter (Nitrolim) used from 100 lbs. per ton of dry material to 50 lbs. per ton large losses of nitrogen still occur. Later experimental work by the Government Agricultural Chemist has gone to show that very little starter especially in the case of green material is required. It is found that as little as 200–300 lbs. cattle manure in suspension or 50–100 lbs. Fine Bone Meal is sufficient starter per ton. With the latter material the phosphate percentage is also considerably increased and there is no fear of the loss of the phosphate so supplied. For green material, the rate may be about $\frac{1}{4}$ of the above amounts.

As very little nitrogen is added—only sufficient to start the fermentation,—there can be practically no loss of Nitrogen from this source. While the manure thus made may be lower in nitrogen content than one to which larger quantities of starter are added, yet as loss of nitrogen is eliminated and nitrogen is expensive to buy it serves the purpose.

The main thing is to get a bulk manure at reasonable cost. If it is a little lower in actual food materials, Nitrogen, Phosphoric Acid and Potash, these can be augmented *after* the manure has been made and just before application to the soil or the bulk manure or the artificial may be applied separately. Once in the soil there is much less risk of loss than seems to be the case when the nitrogen is added as starter. The content of the manure, therefore, will depend almost wholly on the nitrogen content of the original material.

Jungle grass of which there is a plentiful supply in a number of the Planting Districts should be cut before it seeds. If cut about July and August when crops are short any way and made up in the usual way, application of bulk manure could be made in December–March during the dry weather when crops are again short. It could thus be worked into present estate practice and better use made of the labour force.

(2) The rate of fermentation should be controlled. The pit system on the whole offers better opportunities than the heap system. When the heap is on the surface there is greater trouble in keeping the sides and top of the heap thoroughly moist as is necessary, and while the centre of the heap may be thoroughly rotted the sides are not. The pit system obviates this as it prevents evaporation to the same degree as in the heap; and so less water is used and a more even fermentation obtained all through the heap. The rate of fermentation is also controlled and lowered so that there is less chance of loss of Nitrogen.

The pit may be dug about 3 feet and the soil from it should be thrown up on the sides and consolidated to form a low wall all round to a height of 3 or 4 feet. The walls need not have perpendicular sides, but may slope from both sides towards the centre, as owing to the shrinkage of the material on rotting, the heap will sink even though it is broader at the top than at the bottom. The heap can be made a foot or two higher than the mud wall to allow for settling down. The wall so made prevents any surface water from entering the pit.

Generally speaking 20-30 cubic yards of air dry material represent 1 ton; and 7-10 cubic yards of green material, depending on the degree of wetness or dryness. The heap is made layer by layer taking care that all sheaves are broken up and evenly spread. Each layer is watered and the necessary amount of starter added. The amount of water required varies but generally runs about 500 gallons per ton. Most of this water is supplied when the heap is being made and the remainder as and when it is necessary to keep up the moisture content which should be kept between 75-80 per cent.

It should be used when the loss of dry matter has not exceeded 50 per cent. Roughly the individual stalks should be so rotted that while still retaining their shape, the slightest pull will break them and practically no resistance is given, when a forkful of the manure is pulled out of the heap.

The total cost incurred at Tenmalai amounted to Rs. 16-6-0 per ton of dry material and the cost of the finished manure works out at Rs. 17 per ton. On the same basis which is comparatively high, the cost of the finished article at Peermade would amount to Rs. 10 per ton for the pit system and Rs. 11-4-0 per ton for the heap system. With a moisture content of 75 per cent and a nitrogen content of 1 per cent on dry matter the manure should contain 0.25 per cent nitrogen. Valuing the manure on the same basis as Groundnut Poonac containing 7 per cent nitrogen at Rs. 120 per ton, the unit cost works out at Rs. 17 and on this basis the Artificial Farm Yard Manure is worth Rs. 4-4-0.

If however, as at Peermade the nitrogen content increases to over 3 times the amount calculated above, the value of the manure increases to Rs. 12-12-0 per ton on nitrogen content alone; and it becomes an economic proposition as the actual cost of production amounted to only Rs. 10.

With the reduction in the amount of starter advocated the manure will cost still less; and could therefore be produced economically.

This method of making Artificial Farm Yard Manure will no doubt appeal to many who have large areas of jungle grass near by and it should prove a useful and easily worked source of the all important organic matter for soils which are in need of it. Urine would make an excellent starter; and if it were possible to utilize this source of nitrogen large amounts of grass and other organic material could be turned into bulk manure with a high nitrogen content at low cost. For those having cattle the obvious thing to do is to use as much bedding as possible to soak up all the urine, and soak it well with water before putting it into the manure pit.

UNPRUNED TEA

BY

H. R. COOPER, B. Sc., F. C. S.

CHEMIST TO THE SCIENTIFIC DEPARTMENT, I. T. A.

Of late years tea has been left unpruned far more frequently than it used to be. On some gardens nearly half the area is being left unpruned annually.

This system has practical advantages.

ADVANTAGES CLAIMED

1. Lengthening of plucking season.

From the unpruned tea, crop is obtained in the early months of the year (March, April, May) when pruned tea would be yielding little; while tea pruned on two-year wood comes away later and will flush later in the season if weather continues favourable. The plucking season is thus extended at both ends. This, however, is not always such an advantage as it looks at first, since unpruned, as well as pruned, will be yielding most heavily in July, August and September; and the pressure during these months is increased by the use of unpruned tea because it takes so much longer to pluck, since the average weight per shoot is less from unpruned than from pruned tea.

Unpruned tea, however, offers very real advantages to gardens on which the whole area cannot be plucked. In such a case a very fair crop may be obtained from unpruned tea plucked only from March to July when it can be abandoned. From good tea the cover will then be such that little or no jungle will grow, and therefore the tea will not suffer from lack of cultivation, while the tea being left to grow unplucked, will benefit enormously.

Meanwhile the tea which was pruned on two-year wood, can be allowed good growth in the early part of the year, to give a good crop starting late in the season. In this way a smaller crop will be made than if the whole area were plucked for the whole year, but the loss of crop is counter-balanced by a gain in the health of the tea, because it is all underplucked; and over a series of years a bigger crop of better tea may be expected than if it were attempted to pluck the whole area with too small a labour force.

2. If plucked for the whole year better crops are obtained by the use of unpruned tea.

This is generally true at any rate for a time, but the gain is not so great as is often stated.

If the season is favourable, tea which has given an average of 10 mds. per acre pruned annually, may give 15 mds. if left unpruned. In the following season, however, after pruning on two-year-old wood, the crop will be less than the normal yield from pruned tea, and of course much less than it was from the previous year's unpruned.

In computing the gain from unpruned tea one frequently finds planters comparing the unpruned yield with the following year's yield from tea pruned on two-year wood.

For example the following yields may have been obtained—

Unpruned	Pruned
15 mds.	8 mds.

and the gain from unpruned tea is thus sometimes considered to be, in such a case, 7 mds. per annum.

It is, however, much more likely that the yields, if the tea had been pruned in both years, would have been, at least

Pruned	Pruned
10 mds.	10 mds.

The total in two years being thus 20 mds. as against 23 mds. in two years, using unpruned tea in one of the years. That is, the gain may be only about $1\frac{1}{2}$ mds. per annum instead of 7 mds. Even such a gain, of course, is very well worth having if the bushes are not deteriorating from the treatment.

3. Thicker wood is left to prune on after leaving bushes unpruned.

This is, of course, true. Other things being equal, thicker wood will naturally be grown in two years than in one year.

Thick wood, however, is only valuable because it indicates that the wood is in healthy, strong-growing condition. Since a cut on thick wood is less likely to heal than a cut on thinner wood, there is, however, certainly no advantage in cutting on thick unhealthy wood rather than on thinner healthy wood.

When thin twiggy wood is being grown on a poor bush, it would generally be better merely to clean out well, and to leave more growth before plucking after pruning, rather than to leave unpruned.

4. After leaving unpruned, the bush is easier to clean out.

The strong healthy shoots grow at the expense of the poor ones, which become *banjhi*, fail to grow, and often die. It is then a much easier matter to see which shoots should be taken and which left. On tea properly attended to annually there is seldom any difficulty in cleaning out moderately and well; but on good tea which has become congested with a mass of small shoots, it is often of great advantage to leave it unpruned and then clean out.

5. The time and money spent on pruning are reduced.

The use of unpruned tea, then, offers advantages. It is necessary, however, to consider whether the disadvantages may not outweigh them.

Deterioration of tea from unfavourable seasons.—The tea crop generally has gone down since 1918. There are many reasons for this. The poor market in the slump year caused a deliberate curtailment of the crop in 1920, and 1921; while many gardens still suffer from decreased expenditure, and increased heavy pruning, immediately after the slump. Greater care in plucking has also tended towards a reduced crop. Still it is quite clear that large areas of tea are not now in condition to give the crops which they did in 1918, whatever the plucking. Large areas of tea have in fact deteriorated in the past few years. This has been due to many factors. Decreased manuring, decreased cultivation, and over-plucking have contributed in many cases; but there can be no doubt that we have latterly experienced a preponderance of seasons, which have been bad climatically, particularly in respect of droughty springs. 1919, 1922, 1923, and 1924 were all bad in this respect. 1925 was bad on account of low temperatures and failure of the rain later on, but although crops generally are down, the bushes are generally in better condition at the end of 1925, with its good spring, than at the end of 1924, after three successive dry springs.

(To be concluded next week.)

THIRTY YEARS OF WORLD TEA SHIPMENTS

BY

C. G. FREKE, DIRECTOR GENERAL OF COMMERCIAL
INTELLIGENCE AND STATISTICS, INDIA

(WITH ACKNOWLEDGEMENTS TO 'THE TEA AND COFFEE TRADE JOURNAL')

Quantity of tea exported by sea and land to foreign countries from Indian, Ceylon, China, and Java, in the years 1896-97 to 1924-25, with variations in Index numbers, taking the figure for 1896-97 as 100.†

	India	Ceylon*	CHINA†		Java‡
			Black and green	Brick, tablet, and dust.	
	lbs.	lbs.	lbs.	lbs.	lbs.
1896-97 ...	150,421,245 [100]	110,095,194 [100]	161,538,933 [100]	78,567,333 [100]	...
1897-98 ...	152,344,905 [101]	114,460,318 [104]	137,097,600 [85]	75,781,867 [98]	...
1898-99 ...	158,539,488 [105]	122,395,518 [111]	147,967,200 [92]	68,017,067 [87]	...
1899-1900 ...	177,163,999 [118]	129,661,903 [118]	153,669,067 [95]	71,205,067 [91]	...
1900-01 ...	192,300,658 [128]	149,264,603 [136]	144,270,933 [90]	52,190,667 [66]	...
1901-02 ...	182,594,356 [121]	144,275,608 [131]	119,390,000 [74]	42,740,533 [54]	...
1902-03 ...	183,710,931 [122]	150,829,707 [137]	128,226,933 [79]	78,512,400 [100]	...
1903-04 ...	209,552,150 [139]	149,227,236 [135]	140,607,867 [88]	83,813,600 [107]	...
1904-05 ...	214,300,325 [142]	157,929,333 [143]	132,366,933 [83]	61,493,733 [78]	...
1905-06 ...	216,770,366 [144]	171,256,703 [156]	112,152,533 [69]	70,784,267 [91]	25,650,156 [100]
1906-07 ...	236,090,328 [157]	171,558,110 [156]	108,864,534 [67]	79,506,133 [101]	27,455,019 [107]
1907-08 ...	228,187,826 [151]	181,126,298 [164]	130,022,266 [80]	84,940,000 [108]	29,286,402 [114]
1908-09 ...	235,089,126 [156]	181,436,718 [165]	129,265,733 [80]	80,885,733 [103]	36,579,941 [143]
1909-10 ...	250,521,064 [167]	189,585,924 [172]	120,174,800 [74]	79,617,600 [101]	36,679,003 [143]
1910-11 ...	256,438,839 [170]	186,925,117 [170]	123,947,734 [77]	84,158,943 [107]	40,639,185 [158]
1911-12 ...	263,515,774 [175]	184,720,534 [168]	137,788,933 [85]	57,251,467 [73]	50,362,607 [196]
1912-13 ...	281,815,329 [187]	186,632,380 [169]	127,826,800 [79]	69,733,200 [89]	61,691,452 [241]
1913-14 ...	291,715,041 [194]	197,419,430 [179]	109,259,733 [68]	82,274,400 [105]	64,938,907 [253]
1914-15 ...	302,556,697 [201]	191,838,946 [174]	117,337,867 [73]	81,125,333 [103]	71,322,504 [278]
1915-16 ...	340,433,163 [226]	214,900,383 [195]	143,662,000 [89]	93,776,667 [119]	101,603,335 [396]
1916-17 ...	292,593,938 [194]	208,090,279 [189]	126,260,800 [78]	72,259,733 [101]	98,006,121 [382]
1917-18 ...	360,631,933 [240]	195,231,592 [177]	89,115,333 [55]	60,936,666 [78]	80,236,200 [313]
1918-19 ...	326,645,780 [217]	180,817,744 [164]	43,422,933 [27]	10,445,866 [13]	61,853,000 [241]
1919-20 ...	382,033,694 [254]	208,560,943 [189]	71,801,200 [44]	20,182,400 [26]	110,792,430 [432]
1920-21 ...	287,524,697 [191]	184,770,231 [158]	38,908,800 [24]	1,809,867 [2]	93,680,400 [365]
1921-22 ...	317,566,850 [211]	161,610,966 [147]	53,892,533 [33]	3,484,633 [4]	67,652,200 [264]
1922-23 ...	294,700,469 [196]	171,807,581 [156]	73,336,933 [45]	3,472,800 [4]	80,713,600 [315]
1923-24 ...	344,774,111 [229]	181,939,731 [165]	98,042,133 [61]	8,813,467 [11]	90,138,400 [351]
1924-25 ...	348,476,011 [232]	204,931,217 [186]	91,345,333 [56]	10,779,333 [14]	105,113,200 [410]

* The figures for years previous to 1905-06 and also from 1917-18 to 1922-23 relate to the calendar year.

† For calendar year.

‡ In the case of Java the figure for 1905-06 has been taken as 100, earlier figures not being available.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING JULY, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	419	...	...	...	7	...	...	...
Calicut	23	...	...	...	...	...	...	...
Cochin	140	...	...	...	...	...	...	...
Bombay	...	...	...	...	71	1	...	...
Total	582	...	...	...	78	1	...	...
Previously	10,595	...	26,375	32,196	22,994	9	101	7,467
Total cwts. since 1-1-26.	11,177	...	26,375	32,196	23,072	10	101	7,467
<i>Rubber—</i>								
Madras	...	1,935	29,080	...	224	...	11,200	...
Calicut	...	23,640	...	...	...	...	...	...
Cochin	...	281,750	...	...	...	...	118,720	...
Tuticorin	...	112,437	17,230	8,960	...	...	80,765	17,934
Alleppey	...	134,149	...	...	...	...	...	...
Total	...	553,911	46,310	8,960	224	...	210,685	17,934
Previously	...	2,582,439	2,320,685	69,159	...	...	694,384	108,829
Total lbs. since 1-1-26.	...	3,136,350	2,366,995	78,119	224	...	905,069	126,763
<i>Tea—</i>								
Madras	14,579	1,469	431,839	...	1,811	2,040	...	200
Calicut	6,976	...	...	...	...	...	...	...
Cochin	78,721	35,164	...	...	...	...	...	...
Tuticorin	...	262,040	1,621,041	...	...	...	...	...
Alleppey	...	31,944	...	...	...	...	...	...
Total	100,276	330,617	2,052,880	...	1,811	2,040	...	200
Previously	149,065	1,314,457	10,388,994	6,590	1,593	6,040	10,400	...
Total lbs. since 1-4-26	249,341	1,645,074	12,441,874	6,590	3,404	8,080	10,400	200

COMMERCIAL AND METEOROLOGICAL

I. The Rupee Exchange for the week ending September 18, 1926
Bank Selling Demand Draft on London

13th	14th	15th	16th	17th	18th
17 15/16d.	17 15/16d.	17 15/16d.	17 15/16d.	17 29/32d.	17 29/32d.

II. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea					
Mark	Pkgs.	Price	District	Week ending August 21, 1926	January 1 to August 21, 1926	January 1 to August 21, 1925		
		s. d.		s. d.	s. d.	s. d.	s.	d.
(A) TEA (WEEK ENDING AUGUST 21, 1926)			N. India.	1 6.14	1 8.46	1 5.08		
			S. India	**1 5.59	††1 8.26	††1 6.04		
(a) Anamallais—			Ceylon...	1 6.83	1 8.78	1 7.64		
Periakaramalai ...	227	1 6½	Java ...	1 2.83	1 4.61	1 0.80		
Nulla Mudi ...	165	1 6	Sumatra.	1 3.24	1 5.39	1 4.22		
High Forest ...	82	1 5¼	Nyassa- land.	1 3.96	1 5.85	1 1.11		
Ani Erangel ...	244	1 4	Total ...	*1 5.97	†1 8.14	†1 5.57		
(b) Central Travancore								
Glenmary ...	58	1 5¼						
Stagbrook ...	216	1 5½						
Caradi Goody ...	180	1 5½						
Twynford and Ashley...	190	1 5¼						
(c) Kanan Devans—								
Chockanad ...	109	1 7						
Kalaar ...	84	1 7						
Kanniamallay ...	69	1 7						
Yellapatti ...	137	1 6¾						
(d) Mundakayam—								
Orkaden ...	120	1 4¾						
Yendayar ...	246	1 4¼						
(e) Nilgiris—								
Nonsuch ...	144	1 8½						
Prospect ...	120	1 8½						
Woodlands ...	72	1 8½						
Ibex Lodge ...	110	1 8						
(f) Nilgiri-Wynaad—								
Devarashola ...	192	*1 6¾						
Seaforth ...	125	1 5¾						
(g) South Travancore—								
Poonmudi ...	88	1 5½						
Braemore ...	79	1 4¾						
Invercauld ...	54	1 4¼						
(h) Wynaad—								
Erramaculla ...	160	1 4¾						
Fringford ...	47	1 4¼						
Elstone ...	40	1 4¾						
Chulika ...	61	1 3						

(B) COFFEE

London Prices (seven days ending
August 31, 1926)

None of the 627 bags Indians (which were all 1924-25 crop) offered at the public auctions were sold; but we learn that up to 165s. has been paid privately for Mysore A.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, September 21, 1926, was 20½ d.

** Based on 5,722 packages.

†† " " 112,268 "

†† " " 115,365 "

* Based on 75,756 packages.

† " " 2,034,719 "

† " " 1,881,059 "

(b) *Précis of Reports on the London Market received on Monday, September 20, and covering the seven days ending Tuesday, August 31 :—*

1. *Tea*.—We have to postpone until next week our selections from the best prices obtained at the auctions held during the week ending Saturday, August 28 ; since the Tea Brokers' Association's report apparently missed the Mail. We understand, however, that while some remarkable prices were paid for the finest qualities ; yet common kinds were in very poor demand and the nett result, so far as South India was concerned, was a drop of $\cdot 59d.$ on the average of $5\cdot 59d.$ which was obtained during the previous week. It is perhaps worth recalling that the South Indian average for the week ending August 29, last year was only $1/1\frac{3}{4}d.$; but the figure gradually rose to $1/8d.$ before the end of the year.

2. *Rubber*.—London stocks increased by 481 tons to 30,159. The market remained fairly steady at about $20d.$ 'spot' with premia of a $\frac{1}{2}d.$ and $1d.$ respectively on deliveries up to March and throughout the whole of next year.

3. *Coffee*.—On August 31, the London stocks of African, Indian and other kinds respectively were given in bags as 21,024, 12,163 and 80,973 as against 30,590, 38,105 and 121,191, on the corresponding date last year. Good qualities are scarce and command full prices as is indicated on the previous page. At least one authoritative quarter estimates that the 1927 Brazilian crops will be unusually large.

4. *Pepper*.—The market remained quite firm ; and fair Tellicherry was selling at $10\frac{1}{2}d.$

III. Weekly infall Statement

From Sunday, September 12, 1926, to Saturday, September 18, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	6·25	54·31	60·56	19. Naduvattam	6·04	82·77	88·81
2. Kalthuritty.	5·86	89·40	95·26	20. Coonoor ...	3·41	15·14	18·55
3. Tenmalai ...	N.R.	91·05	N.R.	21. Kotagiri ...	3·46	27·05	30·51
4. Mundakayam.	10·03	115·83	125·86	22. Ootacamund	3·19	32·14	35·33
5. Peermade ...	9·83	148·54	158·37	23. Yercaud ...	N.R.	29·56	N.R.
6. Twyford ...	10·40	163·13	173·53	24. Devala ...	N.R.	120·70	N.R.
7. V'periyar ...	3·25	69·32	72·57	25. Gudalur ...	5·07	67·87	72·94
8. Kalaar ...	10·71	168·17	178·88	26. CALICUT ...	7·81	103·55	111·36
9. Chittuvurrai	1·02	29·36	30·38	27. Kuttiyadi ...	N.R.	131·04	N.R.
10. BODI'KANUR	0·70	N.R.	N.R.	28. Vayittiri ...	10·95	163·79	174·74
11. COCHIN	5·75	89·99	95·74	29. Manantoddi.	4·48	93·73	98·21
12. Mooply Valley,	8·54	109·93	118·47	30. Billigiris ...	1·84	34·57	36·41
13. Pachaimalai.	4·84	104·53	109·37	31. Sidapur ...	2·99	63·67	66·66
14. Mudis ...	13·16	199·70	212·86	32. Pollibetta ...	2·88	86·27	89·15
15. Nell'pathy...	5·54	79·77	85·31	33. Somwarpett.	3·30	62·64	65·94
16. POLLACHIE.	0·19	20·23	20·42	34. Ballupete ...	2·64	58·13	60·77
17. Manjeri ...	8·28	110·45	118·73	35. MANGALORE	4·69	92·81	97·50
18. Nilambur ...	5·92	101·67	107·59	36. MADRAS ...	0·24	8·55	8·79

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 40] SAT., OCTOBER 2, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	653	Unpruned Tea ...	657
Personalia ...	655	District Notes—	
Letters to the Editor—		A. N. Coorg ...	664
Political Representation ...	656	B. Shevaroy ...	666
Do. ...	657	Commercial and Meteorological.	671

EDITORIAL NOTES

When this issue emerges from the Press, the U.P.A.S.C. Cricket team will have already begun its contest with the M.C.C. and its Rucker team will be just on the point of entering the arena against the Lancashire Fusiliers. We naturally take the opportunity of wishing both the teams every success; but at the same time we realize that they are composed of men who 'Love the game better than the prize,' and so even should they sustain defeat we feel it is not amiss to congratulate them on behalf of the U.P.A.S.I. in general and of its Sports Club in particular on the sporting spirit which has brought them down to Madras from their widely scattered estates.

In last week's issue we gave the names from which the selection of the Cricket team will finally be made; and we now learn that the Rucker team will be chosen from amongst the following 17 members of the Club:—

T. G. Stockwell (Capt.); J. S. Allan; S. R. Armitage; C. O. Commin; M. C. DeCourcy; C. E. Dennys; W. J. Dixon; H. H. English; M. C. Fraser; G. A. LeMesurier; W. B. Page; E. R. Peachy; K. C. Pryor; W. S. Shaw; E. A. Stone; E. R. Walker; and R. Walker.

We learn that the date for the game between Calcutta and the Winners of Lancashire Fusiliers *vs.* U.P.A.S.C. has been altered from Tuesday, October 5 (as shown in the original drawing published on page 624 of our issue of the 18th ulto.) to Monday, October 4. The game will be played on the ground of the Lancashire Fusiliers.

Mr. G. W. Fulcher, the Honorary Secretary of the U.P.A.S.I. Sports Club, asks us to say that he hopes all Members who desire to obtain Club Blazers will immediately advise him to that effect; as until the approximate number required has been ascertained, he will not be in a position to select a supplier and place a contract on the most advantageous terms.

The Royal Commission on Agriculture have revised their South Indian programme as published on page 621 in our issue of September the 18th, and now expect to reach Bangalore on the afternoon of November the 8th. Leaving Bangalore on the night of the 11th idem they are due in Coimbatore on the following morning; and remain there till the night of the 17th, when they entrain for Madras where they stay from the 18th morning until the night of the 26th.

The average price obtained for rubber during August which was the first month of the present 'Restriction Quarter' works out at about 1s. 7½d. per lb.; and, as the price remained at or under 1s. 8d. during September, it seems obvious that (unless it goes at once to, and remains throughout October at, about 1s. 11d.) the exportable quota will be reduced with effect from November the 1st.

We are obliged to the Honorary Secretary for sending us the following list of the Chairmen and Honorary Secretaries of the Shevaroy Planters' Association since its foundation in 1879:—

Year	Chairman	Honorary Secretary
1879	Dr. John Short.	W. I. Lechler.
1880	Do.	Do.
1881	Do.	Do.
1882	Do.	Do.
1883	R. Gompertz.	A. W. Morris and C. G. Lechler.
1884	Do.	C. G. Lechler.
1885	Do.	T. F. Gaitskell.
1886	No Chairman elected for the year, the following presided as Chairman at various Meetings.	W. I. Lechler.
1887		Do.
1888		Do.
1889		Do.
1890		Do.
1891		Do.
1892	C. G. Lechler, J. C. Large, H. Gompertz, A. Dickins, T. F. Gaitskell, R. Gompertz, C. Rahm, F. Short.	Do.
1893		C. Rahm.
1894		F. Short and H. W. Leeming.
1895		H. W. Leeming.
1896	C. G. Lechler.	Do.
1897		R. Gompertz.
1898		Do.

Chairman and Honorary Secretary

1899	R. Gompertz.	1910	C. Dickins.
1900	Do.	1911	Do.
1901	Do.	1912	Do.
1902	Do.	1913	Do.
1903	B. Cayley.	1914	Do.
1904	W. I. Lechler.	1915	Do.
1905	Do.	1916	Do.
1906	Do.	1917	Do.
1907	C. Dickins.	1918	Do.
1908	Do.	1919	E. L. Poyser and A. H. Whittle.
1909	Do.		

Year	Chairman	Honorary Secretary
1920	S. M. Hight.	H. S. Dickins.
1921	Do.	V. L. Travers Drapes.
1922	C. Dickins.	Do.
1923	E. H. A. Travers Drapes.	Do.
1924	Do.	Do.
1925	Do.	W. A. Rahm.
1926	Do.	Do.

PERSONALIA

(The Editor hopes that all Readers will assist him in endeavouring to make this new section of the Paper as complete a record as possible of Planting News.)

BIRTHS

Macbean.—At Tellicherry, on September 23, to Dorothy, wife of J. S. MacBean of Messrs. Aspinwall & Co., a daughter.

Watson.—At Luckham Estate, Talliar P.O., S. India, on September 16, to Joyce and John Watson, a son.

DEATHS

Allardice.—On September 9, at Mylemoney Estate, Joladalu, H. Allardice, the Superintendent of the Estate.

Bucknall.—On August 27, at Dunster, Somerset, England, Lieut.-Col. William Beverley Bucknall, O. B. E., of Peremboo Colly, N. Coorg.

Cox.—Telegraphic advice was received in Madras on the 23rd ultimo of the death on the previous day of Mr. W. H. Cox, Chairman of Messrs. Peirce, Leslie & Co., Ltd., London.

OTHER PLANTING NEWS

His many friends in South India will learn with the greatest regret that Mr. Crawford Walker of Barwood Estate has had to undergo an operation at Ootacamund for the amputation of his leg below the knee.

The Chairman and Planting Member attended the meeting of the Planters' Labour Act Amendment Committee which was held on the 1st instant at the Secretariat, Madras.

The Returning Officer of the Planting Constituency of the Madras Legislative Council has already received a completed nomination paper for Mr. C. R. T. Congreve. The Returning Officer has also complied with some five other requests for nomination forms; so that it is possible that further completed nomination papers will be received before the time fixed for their return lapses at 3 p.m. on Monday, October 4th.

Mrs. D. C. Fowke and Miss Veronica Fowke of Goominkhan Estate; Miss Hawkins of Nettigudi Estate; Miss Hankin of Coonoor; and Mr. and Mrs. Colthurst of Somerdale Estate sailed for Europe on the 24th ultimo by the S. S. *Malda*.

Mrs. K. B. Hight, the Misses H. E. and K. D. Hight and Messrs. C. L. and N. M. Hight of the Shevaroyes arrived at Madras by the *Mashobra* on the 25th ultimo.

Mr. C. H. Godfrey of Yellikodige Estate, arrived in Colombo by the *Mongolia* yesterday.

Mr. J. A. Richardson of Cochin left Marseilles for India on the 1st instant by the S. S. *Narkonda*.

Mr. R. Lescher of Pullengode is returning to India by a steamer leaving Marseilles on the 22nd of this month.

LETTERS TO THE EDITOR

(*The Planters' Chronicle is not responsible for its Correspondents' views.*)

A. Political Representation

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

I was very interested to see Capt. Windle's article in last week's *Chronicle*. It must be one of a very rare number of occasions, if not the first time, on which the subject has been treated by the Planting Member himself. As I read on however, I must confess to some little disappointment.

The burden of Capt. Windle's song appears to be :—

1. That 'planting subjects are practically not discussed in the Legislative Council'.
2. That 'although a question is technically put in the Council, unless it is of general importance there can be no discussion', etc.
3. That 'the real and main use of a planting member . . . is to become acquainted with Ministers and the Secretaries to Government . . . showing a constant interest in the work of the Council', etc.

I hope I have not been unfair to the Planting Member in separating from their context the phrases emphasized above. My point is, with every deference to the past and present Representatives on the Council, that the Planting Member is not sent to the Council solely and exclusively to watch and wait on the Planting Community's behalf. It is something to know that 'a Member who consistently attends and votes' and who shows 'a constant interest in the work of the Council' can by so acting obtain the ear of those in power, and can at the same time make friends in the Council itself; but it would be considerably to the advantage of us all if our Representative laid as much stress on catching the eye of the Speaker (i.e. the President) as it has been the custom in the past to lay stress on obtaining the ear of the Government.

In the days of *nominated* Members, conditions were admittedly very different from what they are now. Members were 'nominated' to watch the interests of their particular community, but it appears to have been overlooked that Members to-day are 'elected' and although we have in our case 'Communal Representation' the Planting Member is in the Council on all fours with any other elected Member. The Member for the University does not sit still when other than University subjects are being discussed; neither does the Member for the Coimbatore Rural Constituency confine his utterances to Coimbatore Rural matters.

I am open to correction but I believe that in recent years, apart from the Budget on which it is *mamool* for every Member to 'have a go', the Planting Member's has been a very still, small voice, indeed. Is there any reason why he should not take part in the day by day work of the Council? Surely the Planting Community has a stake in the country in exactly the same way as any other community. We have our being and do our work as an integral part of this Presidency; and the subject, let us say, of 'increase of pay to village headmen' to choose one at random, let alone the number of subjects which have, indirectly, their bearing on our daily lives through the channels of Labour, Commerce, Taxation, Transport, etc., are all very much apart of the Planting Member's business.

It is for this reason, I think, more than for any other, that the political representation scheme, proposed by Mr. Congreve, is so necessary. Planters must surely be unaware of the manner in which the European group works in the Legislative Assembly, or they would certainly press for a similar grouping in the Council. The grouping is not racial. It is party grouping, and a strong European party in the Council, well balanced, respected by the other elements, and taking an interest in everything that comes before them from rural economics to high finance would have a steadying influence which would be welcomed by the Government as it would be by the Council and the public at large.

In a word, 'practical politics' not 'parochial representation'.

September 29, 1926.

Yours, etc.,
DEMOS.

B. Political Representation

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

There are rumours that the coming election for Planting M.L.C. is to be a contested one.

May I suggest that if such is the case each candidate be invited to state in your columns what proportion of the acreage under his control subscribes to the U.P.A.S.I.?

September 28, 1926.

Yours, etc.,
A. A. P.

UNPRUNED TEA

BY

H. R. COOPER, B. Sc., F. C. S.

CHEMIST TO THE SCIENTIFIC DEPARTMENT, I. T. A.

(Concluded from page 648, issue of September 25, 1926)

Droughts, of course, are much more marked in the Surma Valley and in the Dooars than in Assam, and in both districts more tea is left unpruned than in Assam. In both districts it is difficult to escape the conclusion that tea which has been frequently left unpruned is in worse condition than tea which has been consistently pruned annually. Again and again the writer has been shown areas, records of which show that they have never recovered after being unpruned for two years out of four, or even sometimes after being unpruned only once. It is very noticeable, also, that gardens where tea has seldom or never been left unpruned do not show anything like so much deterioration in crop, or in appearance of the bushes, as gardens in the same district on which much tea has been left unpruned.

In the opinion of the writer, the general deterioration has been more marked wherever the tea has been unpruned.

Trial of Biennial Pruning.—From garden records it is impossible to obtain figures bearing on this point which can be regarded as very significant. Since no check plots are kept, it is impossible to guess accurately what the yield would have been had the pruning treatment of any particular block of tea been different. Records from the Experimental Station, however, yield figures of great interest. The yields from the Jat Trial Clearance at Tocklai are given on the next page.

This trial now comprises six plots of about half an acre each of six different varieties of tea. Of each plot half is pruned annually; and the other half in alternate years only, being lightly 'skiffed' in the intervening years.

On each plot the eastern end is on better soil than the western end, but as regards the pruning trial this unevenness is neutralized by using the east and west ends alternately for the same type of pruning, so that on the average one type of pruning does not get any advantage over the other in respect of soil.

Plan of Experimental Plots

INE. Pruned in alternate years.	NA. Pruned annually.	KATIA. Pruned in alternate years.	GLO. Pruned annually.	JAN. Pruned in alternate years.	GHAT. Pruned annually.	+N.
KALL Pruned annually.	CHI Pruned in alternate years.	KHARI Pruned annually.	SIN Pruned in alternate years.	BET Pruned annually.	PANI Pruned in alternate years.	

During the six years of these experiments, then, we have made the following average crops from the same tea, treated identically except in respect of pruning :—

Pruned annually 10·18 mds. per acre per annum.

Pruned every other year only ... 10·66 mds. per acre per annum.

The use of unpruned tea has resulted in an average gain of half a maund tea per acre per annum. The gain is less than what many people imagine would be made, but is still very well worth having. The system of leaving the tea unpruned in alternate years, also, has left the tea much lower. At the end of 1924 it was pruned at 16 ins. from the ground, whereas the annually pruned tea was pruned at 22 ins. from the ground. The annually pruned tea will, in the normal course, have to be cut back earlier than the biennially pruned tea will, because, unless special measures are adopted, it will earlier be too high to pluck.

So far, then, the system of pruning the tea only every other year has paid.

An examination of the records, however, shows that the gain has not always been steady.

	Total 1920 & 1921	Total 1922 & 1923	Total 1924 & 1925
Annually pruned	13·80	24·93	22·53
Biennially pruned	19·92	21·91	22·85
Difference due to biennial pruning.. gain	6·12	loss 3·02	gain 0·32

It is worth while to enquire why the system which gave such a big gain during 1920 and 1921, resulted in a loss during 1922 and 1923, and then again in 1924 and 1925 made no appreciable difference to the crop.

In 1920 the pruned tea started the season at 10 ins. from the ground, the skiffed at 27 ins. The bushes then were very different in size.

In 1922 there was a difference in height of only about 11 ins., instead of 17 ins., between pruned and skiffed tea. The difference in crop between pruned and skiffed tea would therefore be expected to be less in 1922 than in 1920. Still the difference in height was great, and, in addition, the skiffed tea was full of buds ready to give immediate crop, whereas the pruned tea had to grow shoots 11 ins. long before plucking commenced. Yet the skiffed tea averaged only 11.15 mds., while the pruned tea averaged 12.30 mds.

In 1924 there was a difference in height between pruned and skiffed tea of only 7 ins., yet the skiffed tea gave 2.65 mds. more than the pruned tea.

The loss in 1922, then, was abnormal. What were the conditions which were responsible for the loss?

Disadvantages of Unpruned Tea.—A plant takes in the whole of its carbonaceous food through its leaves. The whole of the remainder of its raw food material, taken in by the roots, is carried up to the leaves and there is combined with carbon to form prepared food-material which is carried from the leaves all over the plant to feed it. If, then, leaves are left on the bush during the cold weather the bush continues to feed so long as it remains healthy. In that case, it is a great advantage to the bush to leave it unpruned in possession of all its leaves, so long as the stems are not left till they flower instead of continuing to produce leaf. Good indigenous tea has no great tendency to flower if left unpruned for one year.

The water which carried up the food material from the root to the leaf is got rid of by transpiration from the leaf. During normal growth the amount of water transpired by the leaves is equal to that taken in by the roots, less that retained to build up increased stem and leaf. The amount transpired depends mainly on the leaf area, but is increased by high temperature, and by dryness of the atmosphere. The amount taken in depends upon the root area, and is increased by high temperature, also by the moistness of the soil up to a certain optimum moisture.

Unpruned tea has a leaf area which was sufficient during the rains to dispose of all that the roots took in; whenever the leaf area became insufficient for this purpose, the tea made up the deficiency by flushing. In a dry 'cold weather,' day temperatures are still high (particularly when drought persists into March and April) and the atmosphere is very dry, so that the transpiration is increased. On the other hand, the intake of water from parched soil becomes very small indeed. In such circumstances more water may be lost through the leaves than is regained from the soil. The result is drying of the leaf and eventually of the stem. The bush is then in a very weak state, and may not recover when wet conditions set in. The bush suffers even if no disease attacks it, while the probability is that such a bush will suffer seriously from one or more of many pests and blights, and so be further weakened.

1920, with its almost continuously moist and cool cold weather, was exceptionally favourable to unpruned tea. In 1922, except for one fall of 1.8 ins., on March 27, no rain sufficient to reach even the surface roots

fell till April 25. During this time average maximum temperatures were—

January	...	73°F.
February	...	78°F.
March	...	82°F.
April	...	85°F.

1922 then was exceptionally unfavourable to unpruned tea, and indeed its suffering was obvious to the eye. Many bushes cast their leaves, and these suffered least. The remainder became yellow and flaccid. Attacks by red spider and by various leaf diseases were wide-spread. Many of the stems died right back, while many that were left alive were attacked by red-rust and other fungus diseases. In comparison the pruned tea, practically leafless during the drought, naturally fared much better.

In 1924 the season was not so unfavourable, but was not good, so that the gain on the unpruned tea was only just sufficient to offset the natural loss when the tea was cut back on two year wood in 1925.

To leave tea unpruned, then, is to gamble against the weather. A badly droughty spring means that less crop may be made than if the tea had been pruned; and the loss does not finish there, but the tea may be so weakened that it does not recover for several seasons. Of the past few years, 1919, 1922, 1923 and 1924 were dry in the spring over wide areas of the tea districts, and tea left unpruned in those years was weakened in consequence more than it would have been had it been pruned.

The use of unpruned tea also introduces another possible cause for deterioration of the bush.

On well-managed estates when a bush is pruned it is usual, as far as labour-supply will allow, to cut out of the bush all diseased shoots and dead wood which may become diseased. If the sanitation of the bush is thus attended to every second year instead of every year, stem diseases naturally have a better chance of becoming established. After cutting on two-year wood, also, the new shoots on the average, arise much further from the pruning cut than on one-year wood. Even when the new shoot does arise near the cut, the cut is much less likely to heal than on one-year wood. After cutting on two-year wood therefore the bush is left with very much more dead wood than after cutting on one-year wood. Much of this dead wood becomes infected with fungus diseases, and if left for another two years these diseases will, in many cases, grow down and attack the living wood below the point at which the new shoot arises. In that case the removal of the old snag will not free the bush from the disease, which will carry on to hollow out the living stem.

On the Tocklai Clearance, which has just been discussed, *all* dead wood is cut out when the bushes are pruned. In spite of that all the cuts do not heal, and both annually and biennially pruned bushes are infected, to some extent, with wood-killing stem diseases. It is easily observed that the bushes which have been pruned only every other year contain many more diseased branches than the annually pruned bushes. This is particularly noticeable on the parts of poorer soil.

Precautions recommended in use of Unpruned Tea.—The practice of leaving tea unpruned is then attended by some degree of danger, and should not be used indiscriminately. It is a dangerous fallacy that to leave a bush unpruned 'rests' it. On the contrary, it subjects it to a severe strain. It

would be indeed surprising if one could 'rest' a bush while, at the same time, obtaining greatly increased crop from it!

The following principles are believed to be of importance :—

- (1) Having regard to the possibility that the following spring may be a dry one, only tea which is in good healthy condition should be subjected to the risk of being left unpruned.

Young tea, because it is vigorous and not in need of the stimulus of pruning to force it to continue vegetative growth, is particularly suited for being left unpruned. A young bush also requires plenty of leaf to feed it and thus grow strong roots and branches. The introduction of one or two unpruned years, during the building up of a young bush, is very sound.

- (2) Unpruned tea should be manured in order to maintain its vigour.

The mixture :—

2 mds. neutral sulphate of ammonia } per acre
 $\frac{3}{4}$ mds. muriate of potash }

is a very good one for most soils. No phosphoric acid should generally be applied, since it would increase the tendency to over-ripening of the wood, and to early flowering in particular.

- (3) Unpruned tea should, if possible, be sprayed with limesulphur to keep off attacks by insect and fungus, particularly red spider and stem diseases.

- (4) When pruning on two-year wood after leaving unpruned, the pruning should be done early.

The tea should not be left to carry a large leaf area well into the next dry season.

Two-year wood always comes away more slowly and irregularly than one year wood. Tea which has been unpruned for a seasons and then pruned late, will often in bad seasons produce the stunted growth popularly associated with green fly attack, when the same tea pruned early comes away normally.

Early pruning minimises these troubles.

- (5) Tea which has been unpruned and then pruned should not be left to carry the snags of two-year-old wood through two more seasons, as is normally the case when tea is left unpruned every other season.

The best time to remove these snags would be as soon as shoots have come well away after cutting on two-year wood. That is, assuming that the tea is pruned early in December, it might be gone over again in February or early March, and the old wood cut off flush with the top-most healthy shoot. In that case the great majority of the pruning cuts, on a vigorous bush, would heal over, and one great cause of deterioration would be avoided.

Little harm results if these snags are left for one year. It is, however impracticable, after a year's growth on a wide bush, to cut out the dead wood without first removing the top-hamper by pruning. Therefore unless the pruning can be gone over twice, as explained above, the rotation :—

First Year.	Second Year.	Third Year.	Fourth Year.	Fifth Year.	Sixth Year.
Unpruned.	Pruned.	Pruned.	Unpruned.	Pruned.	Pruned.

is much better than the rotation :—

First Year.	Second Year.	Third Year.	Fourth Year.
Unpruned.	Pruned.	Unpruned.	Pruned.

The first rotation however means that only one-third of the total area can be left unpruned.

Variations from absolutely Unpruned Tea.—Unless tea after pruning is plucked very accurately flat, the surface at the end of the year is more or less uneven, and is generally higher in the middle than at the sides. As such a bush is difficult to pluck, it is common to level off the surface by means of a very light pruning. This operation is known as 'skiffing' or 'skutching.'

This operation can, of course, be applied in various degrees of severity. It may be only sufficient to remove shoots which have run away, in order to level off the bush; in which case the tea may be regarded as practically unpruned.

More often it is heavy enough to remove most of the green wood, so as to get below the 'crows' feet' formed by close plucking. This type of 'skiffing' is still very light and it is unnecessary to leave any leaf before plucking hard and close. It probably gives a little less than would have been obtained from unpruned tea, but gives rather better (bigger) shoots, and is less liable to go 'banjhi.'

Since the leaf area is somewhat reduced, tea which is 'skiffed' is rather less liable to suffer from drying of the stems; but the pruning marks offer more easy points of attack for fungus diseases, so that, on the whole, 'skiffed tea' suffers quite as badly as absolutely unpruned tea, in dry seasons.

Occasionally very hard 'skiffing' is seen, so that the pruning almost amounts to an ordinary 'top prune' without any cleaning out. Tea need not be cleaned out every year, and unless the season is a very late one, a bigger crop will be obtained in the year when it is not cleaned out. Tea, which is skiffed very hard, suffers from drought little more than tea which is top-pruned without cleaning out; but it will also give very little, if any, more crop, while it still suffers from the evils of cutting on two-year wood in the following season.

Hard skiffing then offers little profit to offset its disadvantages, while the nearer the tea is to being absolutely unpruned, the greater will be the profit should the season prove favourable.

Effect on Quality.—Unpruned tea in the early part of the season gives very much better liquors than the sappy first flush from pruned tea. The early invoices are thus better from gardens with much unpruned tea. As the season advances the superiority in liquors from unpruned tea disappears, while a greater tendency to produce stalk begins to appear. Stalk from unpruned tea is probably due to its greater tendency to grow *banjhi* shoots on account of its great leaf area. It is probable that the production of stalk from unpruned tea might be greatly reduced by very careful plucking. That is, if complete *banjhi* shoots were never taken, but only the top soft leaf of a *banjhi* shoot as soon as it appears, then hard stalk would be largely avoided, and the tendency of the bush to go *banjhi* would be reduced. This however is very difficult, and in practice teas of rather less value are made, on the average, from unpruned than from pruned tea.

DISTRICT NOTES

A. North Coorg

PAPER CHASE AT SOMWARPETT

With the usual cheery spirit, 'the world and his wife' turned out on September 6, to see the 'Coorg Hunt' have a splendid chase over the surrounding country of Somwarpett, with a somewhat elongated fox, adorned with a beautiful white brush, as their quarry.

All meeting at Somwarpett Circuit House, the Huntsman and his hounds were driven off at 11 a.m. with their fox at the wheel to Allicutty Bungalow. A few hearty bumps on the journey all helped to prevent 'that sinking feeling'!

On arriving at their first cover, hounds jumped out, and were hard on a scent, straight away killed—and were then well blooded with an empty bottle of gin. Then the fun commenced!!

The Huntsman moved off with his pack to Hos Bede Village, and soon came to a likely cover. Hounds soon found and galloped—sorry (!)—ran hard to the top of the hill—only to be disappointed—but out rushed a fox from Sumpagi wood. With blood up, hounds made plenty of music and chased down the hill—over the road—through some lantana—over a fence into a raggi field. Though they could not view their fox they were hot on the scent down a somewhat stoney path—over a rather unpleasant drop jump—and away to a gap at the end of the field. Here for a moment the trail was lost but finding it again just below the cemetery, hounds had to clear a still fiercer drop, and 4 ft. 3 ins. hedge beyond, but unfortunately found they had lost their fox.

After a short hack along Lover's Lane, the fox was viewed again. Anticipating hounds would follow him hard and fast he took his line over a ditch with a sharp bend to the left and made towards a hedge with a stream on the take-off side—but hounds were too cunning and ran across to cut him off, thus avoiding some good obstacles. With hounds on the top side of the lantana and the fox below, there seemed to be much hesitation—the fox really thought he was trapped; but hearing hounds move back to his trail, he risked being chopped, and walked slowly through a gap in the lantana and reaching the end slipped quickly away to the right.

Hounds then moved on to Cowalcanduru and 'found' within a minute close to the spectators. With a splendid scent they ran over quite a fair country with a few natural fences. Finally jumping on to the road, they found cars coming down the hill—it checked hounds a moment—but they had not headed the fox so what did it matter? It really gave just a little colour to that picture we always have in our mind—'Our leave and how we are going to spend it.' Where was the fiery master to utter curses upon the drivers? 'Just a little pink please—thank you—and my brush?'

Finding the trail again, hounds spotted their fox on the top of a steep rock hill—perhaps another little picture for those with heaps of imagination.

Out in the open again, and over two ditch jumps. Hounds ran well and clearing a stiff jump in front of the spectators checked for five minutes.

With a view to suiting both tastes, the second of part of the day's run was to be for the ' Hunt to ride ' Brigade. It was wonderfully good going.

Hounds moved off again but even with their fox just ahead of them, were unable to run hard down the hill and over the road. Here the fox had a great advantage by knowing every inch of his country and knew where to drop on to the road. Getting a pig lead he was able to get clean away though hounds were fast on his trail. Running hard over good going—they suddenly lost their trail—but with a glance to their right viewed their fox moving swiftly up to Hanigalu—' So near and yet so far.' Hounds ran hard, cleared a fence and later on ' in-and-out.' But the fox was clear, and giving a final glance before he jumped found no one in sight—but casually glancing to his right he found a solitary hound cantering up behind him. After a short conversation it was decided to get along with it, and then fox and hound moved as hard as they could over both good and bad going—lanes—alley ways—and a water channel. The fox had the better of it for he was not getting splashed ! It was a rattling good run, but it was a pity the remainder of the hounds were not close up. With a final jump over quite a fair-sized fence with a big ditch on the landing side the fox conveniently ran to ground close to ' The Prince of Wales ' temporarily instituted at the Somwarpett Circuit House.

Caveman—the hound that had been chasing hard for the last mile and a half finished close on his heels—a very game and fast hound always ready to run hard—the type required for Coorg though perhaps he would be even better still if he realized team work is best to catch one's quarry.

The ' field ' was quite a fair one—considering the number of people at home. Those riding were ;—W. E. Dickinson, J. O. F. Maurice, J. H. Sprott, C. S. Iron, C. L. J. Humphreys, R. P. W. Potter and A. M. Webb with his ever faithful ' Fiancée ' as the fox.

After the Paper Chase Mr. and Mrs. Raymond, Mr. and Mrs. Magniac and Messrs. Humphreys and Webb were At Home to lunch at Belur Club which proved to be a very appetising one to all, after their long morning out. After tiffin some played golf, some bridged and some slept !!

The energetic ones were amply rewarded by having a delightful round of golf on one of the prettiest links in S. India. Certain improvements were noticed, and many returned determined to come out and spend a ' Monday ' with their golf clubs. It is said that the Belur Club Committee are most anxious to improve the Links with a view to encouraging the second leading sport of N. Coorg. They have now started a monthly medal competition to be played every second Monday of the month, and Mr. Magniac seems busy collecting all cards for making up the handicaps for the competitions to be held in November.

After tea the party gradually broke up, and all returned feeling all the better after a very cheery and most successful day.

Your Honorary Correspondent.

SOMWARPETT,
August 11, 1926.

B. Shevaroy Hills

As I have had so many enquiries *re* Spraying Coffee with Bordeaux Mixture, I propose this month to deal mainly with this subject as it is not possible to reply individually, and I trust those not interested in Spraying will forgive me. It must however be understood that I do not claim to be an authority on this subject. Any statements I make are purely the result, or apparent result, of my short experience in the field. If I am wrong in anything I say I shall be glad to be corrected either by my Scientific or Practical friends. On Estates where 'leaf disease does little harm,' I do not see that there is much to be gained by Spraying in a year when there is a small crop. If however the crop is heavy the foliage should be retained as long as possible, and as far as we know, Spraying is the only thing that will do this. But is there really any Estate in South India where leaf disease does 'little harm'? It appears to me that the disease has been so insidious that we fail to appreciate the increasing harm that is done.

TIME TO SPRAY

From the small experience I have had with Spraying it would seem evident that with little or no crop, little harm is done by beginning late, that is in June or July; in fact that it may even be better to do so. If on the other hand the trees are carrying a heavy crop one ought to begin operations as soon after the blossom is set, as possible. The reason for this is apparently that the leaves on branches of trees which have just had a heavy blossom are one year old and therefore fully matured. Whether rightly or wrongly, most of us believe that the leaf disease spores do not attach themselves to, or at least do not thrive on, immature leaves. Accepting this as correct, a heavy blossoming field is full of mature leaves when the blossom showers fall, and ready to provide food for the fungus which the rain has started into life again. It is therefore essential to get your leaves covered with the preventive mixture as soon as possible. That this is so seems to be apparent by the fact that I started spraying this year in the middle of May, beginning operations on the heavy bearing blocks, which were those sprayed last year in July-August, and which were finished this year the first week in July; after which the fields with a small crop were tackled. At the present time there is little or no L.D. apparent on these heavy bearing fields, *except in the portion which was done during the first week of July*; and this, about an acre, is pretty bad; while the remainder of the estate, which remains to be sprayed to complete this year's programme and where there is a very small crop, is fairly free from L.D. On one estate up here the owner re-sprayed half the area that was sprayed last year and left the other half alone. The crop on both portions is equally heavy and the trees have all had the same treatment as regards manure but the unsprayed portion is riddled with L.D. while the sprayed half is almost free.

A tree that has a poor blossom will flush heavily, and the flush does not come out till about a month after the blossom showers; and little is to be gained by spraying the flush as soon as it appears. It ought to grow sufficiently long to get something to put the spray on to. If therefore the blossom showers fall in the middle of March, spraying a field with a poor blossom need not be started till the middle of May or end of June; but as the leaves are then only about six weeks old they will not be so subject to an attack of L.D. as the leaves on trees which have blossomed heavily and which are already a year old. Here of course comes in the question of climate; and, if you get a heavy Monsoon in June, spraying in that month

is quite out of the question and it would seem as if one would be more likely to obtain better results by spraying in September and October, if unable to get on with it before the Monsoon, but on the Shevaroyes where we get a rainfall of only 50 to 60 inches in the year and fairly evenly distributed over 9 months, rain does not interfere very much. As the conditions in the different Districts vary so much, the time for spraying must be governed by those conditions and whether it is any good to spray after the Monsoon can only be determined by experiment, but there is no doubt that to obtain the full benefits of spraying, it should be done before leaf disease starts.

RESULTS

Now as regards an instance where an unsprayed block spiked up better than a sprayed one, there are too many factors to be considered for anyone to say, definitely that it was because the unsprayed 'Wintered' while the sprayed did not. In the instance under reply the sprayed block had a crop of 4 cwt. an acre. Well, if this is not a bumper crop it is certainly a good one and a field with such a crop cannot be expected to do as well in the following year as an unsprayed field with a smaller crop, provided the season has been normal. Then there is the question of shade to consider. Experience here goes to show that unsprayed coffee under heavy shade crops better than sprayed in the same condition, though not as well as sprayed coffee under moderate shade. Apparently spraying has some stimulating effect upon the tree for trees handled and sprayed in June side by side with unsprayed fields in August, smothered in vigorous flush and suckers while the latter are in the same condition as the day they were handled. As regards spraying as a guard against untimely rains, I cannot do better than to give my experience this year. In January last, spike in the blocks which were sprayed between July 27, and August 27 last year appeared to be so forward that it gave the impression that 20 cents of rain would bring out a blossom. It may be that the reason for this impression was that the clumps of spike were so large that they appeared to be more forward than they actually were. However this may be, the fact remains that when the rain came down in January it did not make the slightest difference to the spike on the sprayed trees, while the unsprayed mostly went into heavy flush. The rain in that month was fairly general all over these Hills and the quantities registered were from $3\frac{1}{2}$ to $5\frac{1}{2}$ inches and the result is that on most estates the crop is an absolute failure. On the sprayed trees, no new flush at all appeared as a result of the rain, and not only that, but the spike remained in the same condition till the spring showers in March, when the blossom was a gorgeous sight. It was noticeable that even when the blossom came out almost every eye on the branches had its pair of leaves complete and the blossoms rested on them like a powder puff. How then does the theory stand of the necessity of a 'Wintering' such as we know it the falling off of most of the leaves before the blossom? The trees 'Wintered'; inasmuch as they, in common with the rest of the estate, had a slight droop by the middle of March; but they had not had time to get a severe droop on them, though it was noticeable that some of the leaves on the sprayed trees were beginning to ripen. Now why did the sprayed trees behave in this manner? And why did the unsprayed trees flush and fail to produce blossom? I can only attribute it to the following reasons. Scientists have told us that fruit trees do not begin to form their blossom till the proportion of Hydrates and Starch in the tree is in excess proportion to the Nitrogen and that so long as the excess proportion of the former is maintained the formation of bud continues.

Should anything occur during this process to upset this proportion, the formation of bud ceases and the formation of wood begins. As the Hydrates and Starch are formed by the leaves and Nitrogen has to be taken into the tree from the soil by the roots, the formation of bud will continue during the 'wintering' season provided no rain falls to send up a rush of Nitrogen; and provided of course that before leaf disease has deprived the trees of a large proportion of its leaves, the latter have performed their function of creating the necessary excess proportion of Hydrates and Starch. The longer the 'Wintering' continues the lower must sink the proportion of Nitrogen in the tree, and the higher will rise the proportion of Hydrates and Starch; though practically no more of the latter is being manufactured in a tree denuded of its leaves by L.D. This being so what occurs, if rain falls before the 'Wintering' is complete and before the formation of bud is complete in a tree denuded of leaf, seems to be that there is a rush of Nitrogen into the tree which has not a sufficient quantity of leaves to maintain the preponderance of Hydrates and Starch and the immature bud comes out as leaf to supply the deficiency caused by disease. In the case of the sprayed trees, as every eye had its pair of leaves complete when the rain came, the manufacture of Hydrates and Starch was evidently able to continue at such a pace as to maintain its excess proportion to the Nitrogen although there was a fresh flow of the latter up the tree from the soil, and the bud just continued to develop normally till the Spring rains brought it into flower. I would here emphasize that this is not an attempt at a Scientific Screeed but only a common sense argument, and if my common sense is at fault I shall feel thankful to be put in the right path!

As regards the proportion of leaves which should be covered with Bordeaux Mixture to make it effective, this is a matter for experiment; but I would not be inclined to say that at least 90 per cent of the undersides of the leaves must be covered for the operation to be of *any* avail. It is more likely that the degree of benefit obtained will be in proportion to the degree of efficiency attained in spraying. For instance, if we spray 100 per cent of the leaves on half a tree and leave the other half unsprayed it seems reasonable to expect that the benefit derived from the sprayed half will not be any less because the other half was not treated. Of course if the field already has L.D. (and very often it is there and invisible to the naked eye) the full benefit cannot be derived and this may be wrongly attributed to bad spraying, but in such fields I should think 'Dieback' could be prevented by spraying the tips. As regards tangible results of spraying with Bordeaux, I cannot say any more at present than I have done, because the crop produced by the first spraying undertaken on these Hills is still unpicked; but, considering that the blocks selected for the experiment were selected because they were the worst on the estate, and had never given much in the way of crop and always suffered badly from L. D. and I am now expecting to pick something like 5 cwt. per acre, or say per 1,000 trees, I ought to be satisfied, especially in such a bad season.

'HOW IT IS DONE'

As regards how large areas are tackled, when we talk of the whole estate it must be remembered that each estate on the Shevaroy's runs only from 100 to 200 acres, in most cases; but I do not consider a large area a handicap, given a sufficient number of Sprayers. The chief problem of course is water; for it is needed at a time when most streams are dry, but when you really get down to it (not the water, but the whole problem of spraying) it is not as stupendous as it seems at first. Where there is a shortage of water I would say dig wells. Every owner who intends to

spray his whole area should have one two-gallon 'Holder' Sprayer (I can only speak for this type) for every seven acres. He can then at any time get round his whole area in two months 'and that is the way we do it.'

SPRAYING MACHINES

So far we have not been able to find anything to beat the 'Holder' two-gallon Sprayer for convenience and effectiveness. One estate is using an 'Auto' Pump Sprayer with tubing 20 feet in length. The pump, to which is attached an agitator, is fixed over an open container like a small barrel cut in half which holds the Mixture, and the pump handle is worked by one man while another goes from tree to tree between the lines with the hose and nozzle, which latter is of the ordinary 'Auto' type. This gives a steady flow of fine spray instead of a spray which coarsens as the air pressure decreases, as is the case with the 'Holder' small 'Auto'. It also obviates the necessity of teaching the cooly that a coarse spray will not only run off the leaf with its own weight but is, in consequence, a waste of material. His great idea at first is to get rid of as much solution in a day as possible and to this end will widen the opening in the nozzle with a nail or knife. To defeat this enthusiasm, a steel nozzle has been suggested. I fancy the action of the Copper Sulphate on the steel would be just as efficient and rapid as the cooly's implement. From what I have seen of the 'Auto' Pump Sprayer it seems possible we may find the best type to be something similar with 3 or 4 taps at right angles to each other and separate lengths of hose on each. Possibly three would be better, as the fourth is likely to decrease mobility in the Coffee. I understand that Messrs. Drake and Fletcher, Hop and Fruit Growers' Engineers, Maidstone, England, are willing to manufacture any type of Sprayer, to suit any conditions; and if anyone can give them an idea of what is required, they are prepared to make them. Here is a chance for those who have money to experiment with.

EFFECT OF RAIN

As to how Bordeaux stands the Monsoon, last year's experiment was started on July 27, and completed on August 27, during which period we had 7·81 inches of rain of which 2·23 inches fell on August 1, 1·01 on the 2nd and 1·09 on the 3rd. Between August 27 and March 10, when the blossom showers fell we had 30·79 inches. Generally May, July and September are the heaviest rainfall months on these hills and the heaviest totals for those months which we may expect are 15 inches in each. Generally speaking steady and not too heavy rain without wind on top of spraying does not nullify the results, and if it has had a couple of hours to dry, no amount of rain will do harm.

THE MIXTURE

I have not tried anything weaker than 4 lbs. Copper Sulphate, 4 lbs. lime, and 40 gallons water, nor have I tried it without an adhesive. I think I will leave the latter to our Experimental Station, but in my humble opinion I would consider an adhesive very necessary where the Monsoon is heavy. I do not think it necessary to use shell lime if fairly good stone Lime is available. My Mixture last year was made entirely with stone lime and it is very much cheaper. Shell lime packed in sealed tins cost us here Rs. 15-6-0 in packing and freight alone on Rs. 5 worth of the lime, but as the stone lime has this year been of a very poor quality I have been compelled to use the expensive shell lime at times. It might be cheaper to get up raw shells and burn them. Of course there is a certain amount of Magnesium Chloride in most stone lime in India, which is deleterious to plant life, but

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) *Some of the higher London Prices—*

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending August 28, 1926	January 1 to August 28, 1926	January 1 to August 28, 1925
(A) TEA (WEEKS ENDING AUGUST 28, AND SEPTEMBER 4, 1926)				s. d.	s. d.	s. d.
(a) <i>Anamallais—</i>			N. India.	1 6·77	1 8·41	1 4·99
Pachaimallai ...	146	1 5 $\frac{3}{4}$	S. India	**1 5·00	††1 8·18	††1 5·80
Karakundru ...	69	1 5 $\frac{3}{4}$	Ceylon...	1 7·07	1 8·71	1 7·55
Nettigudi ...	57	1 5 $\frac{1}{2}$	Java ...	1 2·97	1 4·57	1 0·67
Mukuttumudi ...	275	1 5 $\frac{1}{4}$	Sumatra.	Nil.	1 5·39	1 4·22
Periakarumalai ...	255	1 5 $\frac{1}{4}$	Nyassa-land.	1 2·51	1 5·78	1 1·08
Pannimade ...	168	1 5 $\frac{1}{4}$	Total ...	*1 6·48	†1 8·09	†1 5·49
Nullamudi ...	164	1 5 $\frac{1}{4}$	District	Week ending Sept. 4, 1926	January 1 to Sept. 4, 1926	January 1 to Sept. 4, 1925
Selaliparai ...	155	1 5 $\frac{1}{4}$		s. d.	s. d.	s. d.
Thonimudi ...	268	1 5	N. India.	1 7·46	1 8·62	1 4·92
Thayamudi ...	242	1 5	S. India	a1 4·83	b1 8·06	c1 5·62
(b) <i>Central Travancore</i>			Ceylon ...	1 6·86	1 8·64	1 7·44
Stagbrook ...	106	1 6	Java ...	1 2·22	1 4·51	1 0·64
Do. ...	123	1 5 $\frac{1}{2}$	Sumatra.	Nil.	1 5·39	1 4·15
Caradygoody ...	100	1 5 $\frac{1}{2}$	Nyassa-land.	1 4·64	1 5·74	1 1·08
Glenmary ...	145	1 5 $\frac{1}{4}$	Total ...	d1 6·76	e1 8·03	f1 5·42
Twyford and Ashley...	121	1 5 $\frac{1}{4}$				
Pambanar ...	107	1 5 $\frac{1}{4}$				
Glenmary ...	96	1 5				
Twyford and Ashley...	212	1 4 $\frac{3}{4}$				
Kuduwakarnum ...	140	1 4 $\frac{3}{4}$				
Ladrum ...	140	1 4 $\frac{3}{4}$				
Cheentalaar ...	106	1 4 $\frac{3}{4}$				
Pambanar ...	80	1 4 $\frac{3}{4}$				
(c) <i>Coorg—</i>						
Glen Lorna ...	53	1 4 $\frac{1}{2}$				
(d) <i>Kanan Devans—</i>						
Pullivasal ...	58	1 6 $\frac{3}{4}$				
Sevenmallay ...	144	1 6 $\frac{1}{4}$				
Vagavurrai ...	120	1 6 $\frac{1}{4}$				
Nullatanni ...	90	1 6 $\frac{1}{4}$				
Gudrale ...	81	1 6 $\frac{1}{4}$				
Nettigudi ...	63	1 6 $\frac{1}{4}$				
Kalaar ...	126	1 6				
Letchmi ...	159	1 5 $\frac{3}{4}$				
(e) <i>Mundakayam—</i>						
Yendayar ...	235	1 4 $\frac{1}{4}$				
(f) <i>Nilgiris—</i>						
Prospect ...	126	1 8				
Bhawani ...	57	1 6 $\frac{1}{2}$				
Sulton ...	30	1 6				
Mailoor ...	63	1 5 $\frac{1}{2}$				
(g) <i>South Travancore—</i>						
Braemore ...	77	1 4 $\frac{1}{2}$				

(B) COFFEE

London Prices (seven days ending September 7, 1926)

No East Indian was sold at the public sales during the period under review ; but private transactions were effected for middling to fine A size at 154s. to 170s. per cwt.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, September 28, 1926, was 21 d. per lb.

** Based on 5,510

†† " " 117,778

†† " " 122,125

* 68,564

† 2,103,283

† 1,966,168

a 3,873

b 121,651

c 126,485

d 83,608

e 2,186,891

f 2,039,100

Précis of Reports on the London Market received on Monday, September 27, and covering the seven days ending Tuesday, September 7:—

1. *Tea.*—While the North Indian average as shown on the previous page registered an advance of close on $\frac{3}{4}d.$, the South Indian average declined. The demand for all grades South Indians was distinctly easier and medium brokens of poor liquoring qualities marked the greatest fall. Messrs. Leslie and Anderson say that three factors are prejudicing the market (a) a superfluity of North Indian Commons and Mediums, (b) the failure of the Russian market to come up to expectations and (c) the fall in consumption in the United Kingdom on account of the Coal Strike and a general depression in trade. As regards (a) our latest advice from Calcutta is that the outturn from the first half of September showed an increase of approximately $1\frac{1}{2}$ million lbs.; and that, given a continuance of the present favourable growing conditions, the increase would quite likely be from 3 to 4 million lbs. for the whole of the month.

2. *Rubber.*—London stocks increased by 605 tons to 30,764 tons during the seven days under review; but the 'spot' market showed no further decline and remained at about 20*d.* The stocks have not been so high since December 1924; and yet it seems likely that they will continue to increase during the next few months since for at least that time shipments from the East seem likely to be greater than deliveries to manufacturers from Stocks.

3. *Coffee.*—On September 7th the London stocks of African, Indian, and other kinds respectively were given in bags as 21,173, 11,819 and 78,375; as against 29,398, 36,847 and 118,378 on the corresponding date last year.

II. Weekly Rainfall Statement

From Sunday, September 19, 1926 to Saturday, September 25, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	1·33	60·56	61·89	19. Naduvattam	1·20	88·81	90·01
2. Kalthuritty.	0·91	95·26	96·17	20. Coonoor ...	0·47	18·55	19·02
3. Tenmalai ...	0·59	96·30	96·89	21. Kotagiri ...	1·16	30·51	31·67
4. Mundakayam.	1·07	125·86	126·93	22. Ootacamund	0·11	35·33	35·44
5. Peermade ...	2·53	158·37	160·90	23. Yercaud ...	0·48	33·22	33·70
6. Twyford ...	3·24	173·53	176·77	24. Devala ...	N.R.	133·23	N.R.
7. V'periyar ...	0·51	72·57	73·08	25. Gudalur ...	1·33	72·94	74·27
8. Kalaar ...	3·03	178·88	181·91	26. CALICUT ...	2·85	111·36	114·21
9. Chittuvurrai	0·03	30·38	30·41	27. Kuttiyadi ...	N.R.	140·25	N.R.
10. BODI'KANUR	0·10	N.R.	N.R.	28. Vayittiri ...	1·73	174·74	176·47
11. COCHIN	4·69	95·74	100·43	29. Manantoddi.	0·96	98·21	99·17
12. Mooply Valley,	2·70	118·47	121·17	30. Billigiris ...	0·95	36·41	37·36
13. Pachaimalai.	0·75	109·37	110·12	31. Sidapur ...	1·21	66·66	67·87
14. Mudis ...	3·02	212·86	215·88	32. Pollibetta ...	1·30	89·15	90·45
15. Nell'pathy...	0·80	85·31	86·11	33. Somwarpett.	0·59	65·94	66·49
16. POLLACHIE.	0·13	20·42	20·55	34. Ballupete ...	N.R.	60·77	N.R.
17. Manjeri ...	2·22	118·73	120·95	35. MANGALORE	1·42	97·50	98·92
18. Nilambur ...	2·46	107·59	110·05	36. MADRAS ...	0·77	8·79	9·56

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod and Co. :—

III. Madras Market Report

(For the week ending Thursday, September 30, 1926)

(A) EXCHANGE

Until to-day there has been no change whatsoever during the week, and the market has been a very quiet one. Even to-day there is not as yet any quoted change in the Bank's buying rates ; but, on weaker advices from Bombay, selling rates are inclined lower and the easier feeling would, we think, leave banks open to be tempted at a lower basis for Bills. Again there has been only very little business, but of course, this is only to be expected at this time of year. The weather up North is reported to be favourable for the Cotton crop ; but this, as well as the Jute on the Calcutta side, is likely to be later than usual. We think the easier feeling in Exchange to-day is due more to lack of business than anything else ; though there has been a certain amount of Bullion enquiry and business in Bombay. To-day's quotations are banks selling 1s. 5 15/16d. T.T. to the 15th October, that rate still being available for Ready delivery, 1s. 5 31/32d. second half October is still available, as also 1s. 6d. first half and 1s. 6 1/32d. second half November, 1s. 6 1/16d. December, 1s. 6 3/32d. January/February, 1s. 6 1/16d. March, 1s. 6 1/32 d. April, 1s. 6d. May and 1s. 5 31/32d. June/August. For three months Credits, it is quite possible to-day that there could be found a buyer at 1s. 6¼d. for a month, though the rate is quoted for the first half of October, 1s. 6 9/32d. second half, 1s. 6 5/16d. first half and 1s. 6 11/32d. second half November, 1s. 6 3/8d. first half and 1s. 6 13/32 d, second half, December, and probably 1s. 6 7/16 d. January/Feb., deliveries. The above rates, however, are the very best available in the market at the moment, and not all banks would operate at them.

(B) MONEY

The easy conditions of the money market remain unchanged, and it is quite a possibility that there will not be the looked-for squeeze for money in January/February or February/March, in which case, the banks may possibly not be forced to sell at Government's buying rate of 1s. 6 3/16d. for cover for Bills then making. At the same time there is very little demand for Forward remittance, and it is said that the Coal Strike is responsible for this being held up. We quote Call money unchanged at 1½ to 2 per cent, short deposits still not wanted, 3 to 3½ per cent for six months and 4 per cent for twelve months. The London/Paris Cross Rate has moved against London to 173 as compared with 176 5/8 last week, and the Pound Sterling is a shade worse in New York at 4.85 3/16 against 4.85 3/8.

IV. Selected Madras Market Quotations

For the week ending Wednesday, September 29, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks (Rs. 10)	10	...
Bank of Mysore (Rs. 100)	160	...
Indian Banks (Rs. 100) Rs. 50	66	69
Indian Banks (Rs. 100) Rs. 10	13	13½
Central Bank (Rs. 50) Rs. 25	26½	27½
Imperial Bank of India (Rs. 500)	1400	...
(Rs. 125) ... ..	...	357½
Chartered Bank (£5)	£ 20	£ 20-15-0
Eastern Bank (£10) £5.	£ 6	£ 6-5-0
Mercantile Bank (£25-A) £12½	£ 29	£ 30
" " (£25-B) £12½	£ 29	£ 30
" " (£5-C) £5	£ 13	£ 13-10-0
National Bank (£25) £12½	£ 46-7-6	£ 47-17-6
P. and O. Bank (£10)	£ 10-3-9	£ 10-13-9
MILLS		
Bangalore W. C. and S. Ordy. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	93	...
Buckingham and Carnatic Ordy. Rs. 100 ... ..	...	205
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	121	122½
Coimbatore Rs. 100	174 c.D.	...
Coimbatore Malls Rs. 85 ... ..	...	...
Gokaks Rs. 100	110	115
Maduras Rs. 100	396	...
INDUSTRIALS		
Deccan Sugar Ordy. Rs. 500	850	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100 ... ..	...	105
E. I. Distilleries and Sugar Factories Ordy. (£0-16-0) ... ..	...	17s. 4½d.
E.I.D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	65	71
Malabar Match (Rs. 10) Rs. 7	1	1½
Marshall Sons & Co. (Rs. 10)	4	4¼
Singareni Collieries, Rs. 10 ... ..	...	10
W. E. Smith Ordy. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	...
Spencers Ordy. Rs. 100	150	...
Spencers 6 per cent. Prefs. Rs. 100	95	97
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	...
Tata Iron and Steel Ordy. (Rs. 75)	58	60
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	73	76
United Breweries Ordy. Rs. 75 ... ..	...	130
United Breweries 6 per cent. Prefs. Rs. 100	93	...
PLANTING		
Cochins Rs. 15	52½	57
Eddivannas Rs. 15	30	31
Kalajas (Rs. 15) Rs. 7	6½	7½
Kinalurs Rs. 10	31	35
Kuttiadis Rs. 15	19	...
Malankaras Rs. 30	107½	112
Peermades Ordy. Rs. 10	27	29
Peria Karamalais Rs. 15	48	50
Periasholas Rs. 10 ... ..	...	7½
Periyars Rs. 10	20	22
Pudukads Rs. 15	52	60
Rockwoods Rs. 10 ... ..	...	5
Thodapuzhas Rs. 10	31	32½
Thirumbadis Rs. 10	21	22
United Nilgiris Rs. 100	115	...
Vellamalais (Rs. 15) Rs. 13	16½ c.R.	...

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 41] SAT., OCTOBER 9, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	675	Letters to the Editor—	
Personalia ...	677	A. Political Representation ...	681
U. P. A. S. C. Teams at Cricket		B. Do. ...	682
and Rugger in Madras ...	678	C. Synthetic Farmyard Manure.	682
		Cut-Back Tea ...	683
		Commercial and Meteorological.	689

EDITORIAL NOTES

The U.P.A.S.C. Rugger Team Some of our Readers may care to have the record of the All India Rugger Tournament which we reproduce below :—

2-10-1926	4-10-1926	7-10-1926	9-10-1926
Lancs. 6 pts.	Calcutta 32 pts.	Calcutta 15 pts.	
beat	beat	beat.	
U.P.A.S.C. 3 pts.	Lancs. Nil.		Calcutta pts.
	5-10-1926		
	Ceylon 14 pts.	Ceylon 8 pts.	
	beat		
	Welch Reg. 5 pts.		
	3-10-1926	6-10-1926	
	Gym. 'A' 9 pts.	Gym. 'A' 3 pts.	
	beat	beat	Gym. 'A' pts.
	P. of W.		
	Volunteers Nil.		
2-10-1926	4-10-1926		
Gym. 'B' 21 pts.	Bombay 30 pts.	Bombay, Nil.	
beat	beat		
B'glore 3 pts.	Gym. 'B' 3 pts.		

Those interested will doubtless themselves enter in the above table the result of the final between the Gym. 'A' and Calcutta which is to be played this afternoon. We heartily congratulate the Finalists, and it especially delights us (in a year when the venue of the tournament is Madras) that one of them proves to be The 'Gym.'s' 'A' team.

In this connection we extend hearty congratulations to Stone, Shaw, Walker (R) and Pryor of the U. P. A. S. C. ; who, we understand, have, as a result of their play last Saturday, been invited by the Selection Committee to join the Madras team which is to leave on a tour of Ceylon about the end of the current month.

We trust that the block of the photograph which Mr. Willie Burke took of the U.P.A.S.C. Team last Saturday will be ready for insertion opposite this page ; but 'best laid schemes o' mice and men gang aft agley' ; and it is possible that it may prove impracticable to reproduce the photograph before our issue of the 16th.

(Since writing the above, we learn that the Photographer has failed to come up to scratch and that the Photograph will not be ready until next week. Ed.)

The Marylebone Cricket Club which, under the Captaincy of Mr. A. E. R. Gilligan, will be disembarking at Karachi next week for a tour of India, Burma and Ceylon is expected to arrive in Madras about January 17, 1927. We understand that arrangements have been made for three matches: one against an Indian XI on January 18th and 19th, another against a European XI on January 20th and 21st and a third on January 23rd, 24th and 25th against a XI comprising both nationalities and representative of the best Cricketing talent in Madras.

Messrs. Peirce, Leslie and Co., Calicut, give the following figures of Exports from the West Coast Ports during the year ending June 30, 1926:—

Ports	Coffee (in cwts.)	Rubber (in lbs.)	Tea (in lbs.)	Pepper (in cwts.)	Cardamoms (in lbs.)	Cinchona (in lbs.)
Alleppey ...	...	2,285,416	943,957	143,553	68,096	...
Badagara ...	...	...	...	8,354	...	...
Calicut ...	10,451	2,060,366	10,830,250	26,230	90,897	71,474
Cannanore ...	...	...	...	6,733	...	...
Cochin ...	770	7,482,446	11,435,034	23,899	...	...
Mangalore ...	32,005	...	34,425	11,066	105,491	...
Tellicherry ...	10,512	138,246	749,051	50,844	223	...

We have just received a copy of the Annual Report of the Director of Agriculture, Jamaica, for the year ending December 31, 1925. It is dated February 22, 1926, so presumably was delayed in the Government Printing Office at Kingston for over six months. The Director writes:—‘Coffee shows a welcome increase from 2,600 tons to 5,200 tons and prices have been good. In reviewing the status of our staple crops, coffee stands out as the product to which Jamaica should now give special attention. The scope for large coffee plantations in Jamaica is limited, but the growth of coffee by our large population of small land owners can be greatly extended to obvious advantage. The coffee crop should be doubled with the least possible delay. I commend the propaganda of ‘more coffee’ as a sound one for the Agricultural Society to take up with the full enthusiasm of its many branches.

We understand that a ‘Rubber Land Act’ has been introduced in the Lower House of the Phillippine Legislature and provides for leasing 450,000 acres of land for 75 years to any one corporation in which American nationals have a controlling interest and which undertakes to plant up 25 per cent of the land with rubber within a period of fifteen years after the execution of the lease. In this connection we note that the Department of Commerce, Washington, has issued a Brochure ‘Possibilities of Para Rubber Production in the Phillippine Islands’ by four special authorities which states that ‘with a population of over 10,000,000 people in the Phillippines, it is believed that the more congested provinces, together with local labour, might ultimately furnish a sufficient force to produce, when mature 70,000 tons of rubber yearly. . . .’

PERSONALIA

BIRTH

IVES.—On September 29, 1926, at 'Lansdowne', Ootacamund, Nilgiris, to Captain and Mrs. C. St. John Ives of Mailoor Estate, Kullakambie, a daughter.

OBITUARY

The Times of the 14th ultimo contained the following Obituary notice of the late Col. W. B. Bucknall, O. B. E., whose death it was our melancholy duty to announce in these columns last week:—

Lieutenant-Colonel W. B. Bucknall, O. B. E., late General List, of Peremboo Colly, Chethalli, Coorg, India, who died recently at Dunster, Somerset, at the age of 56, after a short illness, had an active career in South Africa and India, where he will be well remembered. The eldest son of Mr. and Mrs. T. S. Bucknall, of Kidderminster, he was educated at King Charles Grammar School and at Sherborne. He served through the South African War with the Worcestershire Regiment, and afterwards spent many years in Rhodesia, where he took a keen interest in the public and political life of the country. He was a member of the Legislative Council for the Western Division of Southern Rhodesia, and was once Mayor of Bulawayo and President of the Chamber of Mines.

In the late war Colonel Bucknall served with the West Yorkshire Regiment and in 1917 was sent to India with the South Staffordshires. While in India he held various appointments and was in charge of the British Demobilization and also Commandant of Deolali from 1919 to 1923 in a difficult time. He received the Military O. B. E. and was twice mentioned in dispatches. In 1923 Colonel Bucknall retired and engaged in coffee planting in Coorg, to which industry he devoted himself with energy and was one of the representatives of the Coorg Planters' Association at the meeting of the United Planters' Association at Bangalore in 1925. Colonel Bucknall married, in 1908, Mary, daughter of Mr. and Mrs. Charles Corner, of Bulawayo, Rhodesia; she survives him with one son, born in 1909.

OTHER PLANTING NEWS

The Returning Officer of the Planting Constituency of the Madras Legislative Council has received completed nomination papers for Capt. E. G. Windle and Mr. C. R. T. Congreve; so that there will be a contest for the seat which has been rendered vacant by the Dissolution of The Council unless one of the candidates has withdrawn by the end of this week.

The Madras Planters' Labour Act Amendment Committee, meeting on the 1st instant under the Presidency of the Honorary Khan Bahadur Mohamed Usman Sahib, Home Member, resolved to recommend to the Government of Madras that Act I of 1903 should be superseded by a new act designed to safeguard the interests of all who employ labour under advance.

On the 29th ulto. Mr. A. G. Blake, I.C.S., Sub-Collector, Coonoor, who is under orders of transfer, was given a farewell dinner by leading Nilgiri Planters at the Coonoor Club. The health of Mr. and Mrs. Blake was proposed by Capt. E. G. Windle, M. L. C. and enthusiastically drunk.

Col. J. D. Crawford, D.S.O., M.C., M.L.A., the General Secretary of the European Association, arrived in Madras on the morning of the 1st instant and left the same night for Bangalore, Mysore, Kolar, Mercara, the Anamalais, the Nilgiris, and Trichinopoly. He is expected to return to Madras about the 19th instant and to stay about four days before returning to Calcutta.

Dr. and Mrs. W. S. Shaw hope to occupy the newly erected Tea Scientific Officer's Bungalow at the Nellakotta Experimental Station during the course of this week end; and, on behalf of our Readers, we wish them many happy years in their new abode.

We learn that Mr. J. C. Fraser has taken up tea planting under Mr. C. R. T. Congreve on Castlecroft Estate.

We notice that the Madras *Daily Express* of the 5th instant states that Mr. K. P. Ray, Editor, and Mr. W. E. Kilsby, Printer, have been respectively fined Rs. 100 and Rs. 50 by the Chief Presidency Magistrate, Calcutta, for publishing obscene matter in the *Indian Planters' Journal and Agriculturist*.

Mrs. P. G. Tipping and two children are due to arrive by the S.S. *Mecare* on the 17th instant; and Mrs. N. C. Whilton and daughter are embarking at Marseilles to-day.

Mr. and Mrs. F. C. Scott sailed for Home from Colombo at the beginning of this week.

THE U. P. A. S. C.

AT

CRICKET AND RUGGER

IN

MADRAS

THE LANCASHIRE FUSILIERS vs. U.P.A.S.C.

The old poser as to what would happen if an irresistible force encountered an immovable mass came frequently into our mind as we watched the progress of this game at the Madras 'Gym.' on Saturday, October 2, 1926. The 'Lancs.' has obviously profited by the opportunities afforded by the practice games during the season for coaching in team work; the Planters on the other hand had only played in combination in one practice game on the day before the match. Further handicapped in that three of their men were suffering from fever, it is not to be wondered that they were on the defensive for a goodly portion of the game. This is not to say that the 'Lancs.' were not from time to time in danger of having a score registered against them; and in this connection we would instance the fine drop kick with which Stone shaved the uprights from close on the half-way line in the first 'half'. But it was in the matter of individual defence, where they were not so handicapped by their lack of combined training, that the Planters were supreme. At the very outset English set the standard by bringing off some half a dozen magnificent tackles in close succession, and his brother ½s maintained it right throughout; Shaw perhaps being especially prominent in two spectacular incidents when he grounded Trolan who was just over at the corner flag and later when he brought down Pullan who otherwise would probably have got across. The ½s finely supported

their $\frac{3}{4}$ s; bringing down their vis a vis before (as so often fatally happens) either of them could get away to form an additional attacker of the $\frac{3}{4}$ s, who are thus compelled to leave one of their legitimate 'quarry' unmarked except by the full back. The skipper, Stockwell, we especially noticed for superb work in this direction; and his partner Dennys nobly backed him up.

And on the occasions when the $\frac{3}{4}$ s and $\frac{1}{2}$ s *were* beaten, there was always Stone. We lost the exact count, but his deadly tackling saved several certain scores. It would be invidious to select for mention any particular forwards; since they one and all put their whole heart and soul into the game; and though, through lack of combined training they more often than not lost the ball in the scrum, they followed up wonderfully well and 'gathered round' with most commendable promptness as soon as the run initiated by the opposing backs had been checked. 'No time' saw no score; and the battle waged fast and furious throughout the ensuing two $7\frac{1}{2}$ minutes of extra time. Trolan for the 'Lancs.' scored almost at once far out, and Langlands from a very difficult angle failed to convert. Allan responded almost immediately for the U.P.A.S.C. with a try between the posts, having finely fielded a nicely judged and most opportune cross kick from Peachy on the wing. Stone unfortunately failed to convert, and thus at the close of the first $7\frac{1}{2}$ minutes the score was 3 pts. all. In the second $7\frac{1}{2}$ minutes Langlands got across near the post but missed the kick; so that when the final whistle went immediately afterwards the 'Lancs.' emerged by six points to three as the victors of a magnificently fought fight.

The following were the players :—

LANCASHIRE FUSILIERS.—Bracken, Sweeney, Mr. Haworth, Mr. Langlands and Smith; Capt. Pullan and Major Dawson (Capt.), Mr. Cundell, Mr. Triggs, Mr. Squire, Trolan, Scott, Day, Polly and Parr.

U. P. A. S. C.—E. A. Stone; E. R. Peachy, H. H. English; W. S. Shaw, and J. S. Allen; T. G. Stockwell, and C. E. Dennys; R. Walker, W. B. Page, E. R. Walker, S. R. Armitage, J. H. Dalgleish, K. C. Pryor, G. A. LeMesurier and M. C. DeCourcy.

THE M.C.C. vs. THE U.P.A.S.C.

The team which the U.P.A.S.C. put into the field at Chepauk on Saturday, October 2, 1926, to meet the M.C.C. in the opening match of its Cricket Season seemed—despite the absence of that excellent 'all-rounder,' Sullivan—satisfactorily strong on paper; and, though Harper was caught before a run had been made, the scores put up by Cowdrey, Fraser, Caryl, Sprott and Fulcher gave grounds for hoping that the team would live up to its 'paper strength.' The century was reached before the fall of the 5th wicket; but unfortunately the remaining five batsmen between them only made 8 runs; and the innings closed on Sunday morning with the score at 136. The M.C.C. responded with 220 for 3 wickets and declared; Pullan's 78 having included 12 fours, and the Skipper's contribution of 53 a sixer and 9 fours.

The Planters fared even worse in their 2nd innings than in their 1st; but Nixon who carried his bat for 31 enabled them eventually to make up the leeway of 84 runs by the narrow margin of 16.

The M.C.C. without the loss of a wicket speedily knocked up the amount they required for victory which they thus achieved by 10 wickets and 6 runs. The scores and analyses are given on the next page.

U. P. A. S. C.

FIRST INNINGS			SECOND INNINGS		
J. H. Sprott, b LeMarchand	...	16	Sprott, c Johnstone, b Penfold	...	0
R. H. Harper, c Johnstone, b LeMarchand	...	0	Harper, b Penfold	...	1
E. A. Cowdray, b Nisbett	...	36	Cowdray, b Penfold	...	17
F. A. Caryll, c Capt. Pullan, b Nisbett	...	26	Caryll, c Substitute, b LeMarchand	...	8
J. C. Fraser, c and b LeMarchand	...	29	Fraser, c and b Penfold	...	2
G. W. Fulcher, b Johnstone	...	10	Fulcher, b LeMarchand	...	4
C. E. Dennys, c Nisbett, b LeMarchand	...	3	Dennys, b Penfold	...	11
W. J. Dixon, b Johnstone	...	1	Dixon, b Nisbett	...	12
W. P. Page, c and b LeMarchand	...	4	Nixon, not out	...	31
E. W. Nixon, run out	...	0	Page c and b Nisbett	...	4
M. C. D'Coursey, not out	...	0	D'Coursey, b Penfold	...	2
Extras	...	11	Extras	...	8
Total	...	136	Total	...	100

BOWLING ANALYSIS						BOWLING ANALYSIS					
O. M. R. W.						O. M. R. W.					
LeMarchand	...	17	4	45	5	Penfold	...	11.4	2	29	6
Johnstone	...	12.5	1	25	2	LeMarchand	...	8	0	30	2
Keystone	...	4	0	22	0	Nisbett	...	6	1	15	2
Nisbett	...	5	0	28	2	Johnstone	...	3	0	18	0
Penfold	...	5	1	5	0						

M. C. C.

FIRST INNINGS			SECOND INNINGS		
Col. E. W. C. Bradfield, c Caryll, b Fraser	...	25	Nisbett, not out	...	14
E. K. Shattock, b Cowdray	...	47	Ireland, not out	...	5
E. G. Pullan, retired	...	78	Extras	...	3
C. P. Johnstone, not out	...	53	Total (for no wicket)	...	22
H. R. G. Keystone, not out	...	11			
A. Nisbett	} did not bat.				
W. B. Ireland					
E. R. Rose					
A. G. Penfold					
H. Woodroffe					
H. LeMarchand					
Extras	...	6			
Total (for 3 wickets)	...	220			

BOWLING ANALYSIS						BOWLING ANALYSIS							
O. M. R. W.						O. M. R. W.							
Dennys	5	0	26	0	Fulcher	...	...	3	0	10	0
Fraser	13	1	49	1	Fraser	...	...	3	0	9	0
Cowdray	7	0	36	1							
Sprott	7	0	43	0							
Caryll	3	0	15	0							
Harper	2	0	9	0							
Dixon	3	0	36	0							

LETTERS TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' views.)

A. Political Representation

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

SIR,

From Captain Windle's letter in your paper dated September 25, it would appear as if he were under a misapprehension regarding the scheme for improved Political Representation as advocated by me on many occasions during the past 3 years.

It has never even been suggested that any extra member be appointed, to represent either the Planting, or any other, community.

The proposal which was made ; and which received the support of The Madras Chamber of Commerce, The Trades Association, and The European Association ; was that one of the seats at present held by the non-official European community in the Madras Legislative Council should be given to a full time paid member.

At present it is extremely difficult for the Representatives of the various European constituencies to give the necessary time to political work. They are busy men, generally with large interests outside politics to manage ; and however willing, are quite unable to devote the time required to fully examine and digest the mass of papers which come before the Council : but a whole time Representative, with no other work, could do this, could consider all Bills that come before the Council, arrange meetings of the Party, put a précis of everything before them, organize all details of the Party's work, act as Leader of the Party, and generally help forward any and every policy which may be considered to benefit the country as a whole.

In the past, I have heard it said, that the Planting Member should concern himself only with matters appertaining to planting ; but my contention is, that unless, and until, we, the non-official European community extend our outlook beyond our own immediate personal affairs, and show a more real concern in the interests of India, and India's people as a whole, we cannot expect Indians to regard us as of any value to the political life of this country.

I contend that it is our duty to bear a greater part than hitherto in the government of the country of our adoption, and by supporting the just aspirations of the Indian moderate party to help them forward to the enjoyment of an increasingly greater measure of self-government in the years to come ; and this I submit can only be done by having a whole time Representative in the various councils of India.

Yours, etc.,

C. R. T. CONGREVE.

CASTLECROFT ESTATE, VALPARAI,

October 6, 1926.

B. Political Representation

THE EDITOR,

'THE PLANTERS' CHRONICLE',

MADRAS.

SIR,

The extremely able letter by Demos on page 656 of your issue of October 2, shows in the clearest possible way the weakest point in the present system of our political representation; namely that our 'M.L.C's' have not hitherto taken much interest in the Presidency's politics except from the strictly Planting point of view.

But Demos has not pointed out the reason for this; which is that, however willing they may be to study extra-Planting subjects, and to show an intelligent interest therein, they have hitherto invariably been men with large businesses to manage, and have therefore been quite unable to devote to politics the extra time which such study would require.

The only solution of this difficulty is for Planters, in co-operation with the other non-official European constituencies, to have a full time paid representative in the House; as so frequently advocated by Mr. Congreve.

Yours, etc.,

'FOLK'.

COIMBATORE,

October 6, 1926.

C. Synthetic Farmyard Manure

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

SIR,

It must have been observed by this time, that a series of very interesting articles have appeared in the issues of *The Madras Mail*, dated August 26 and September 11 and 29, of *The Hindu*, dated September 21 and also of *The Planters' Chronicle* of May 1 last regarding the Synthesis of Artificial Farmyard Manure. I quite agree with the views of Mr. Anstead (formerly Scientific Officer to the U.P.A.S.I.) as expressed in the above article of August 26 that the process is very easy and quite practicable; especially for those planters who can make use of the waste materials around their Totes: viz., all kinds of leaves, weed hill grass, jungle, bracken, coffee, pulp, aloes, straw, and lantana, etc. All that is necessary is to use 200-300 lbs. of wet dung to every ton of dry weight of waste material used as defined in the article without using Sulphate of Ammonia or Nitrolim, etc., which, if used, results in a great loss of Nitrogen. It is a fact that without organic matter, the power of the soil and the seed cannot be maintained. At the same time, it is to be admitted that such organic manure as cattle manure cannot be had in sufficient quantities. But we have now some relief in that such bulky organic manure can be replaced by the Synthetic Farmyard Manure to a great extent with less trouble and cost.

Yours, etc.,

S. L. MATHIAS,

*Proprietor of Merthi-Subbangudigy and
Kelagur Estates.*

KAPRIGUDDA, MANGALORE,

October 1, 1926.

(Mr. D. G. Munro, B.Sc., contributed a detailed article on Synthetic Farmyard Manure to *The Planters' Chronicle* of September 18 and 25, 1926. *Ed.*)

CUT-BACK TEA

BY

H. R. COOPER, B. Sc., F.C.S.

CHEMIST TO THE SCIENTIFIC DEPT., I.T.A.

Any form of heavy or medium pruning must be followed by loss of crop for at least several years. Unless, therefore, the bush after this period is permanently and greatly improved by the cutting back, the operation has only entailed increased expenditure and decreased returns.

In a large number of cases in practice, cutting back, so far from having effected any improvement in the bushes, has rendered them much worse than they were before. Unless it is remarkably vigorous any stem cut when an inch or more in thickness throws a new shoot from some distance below the cut. The wood above the new shoot dies, leaving a snag which very soon becomes diseased and starts the rotting of the remainder of the stem. Even when the snag is removed within a year or two after cutting, the cut through dry wood will not callus and disease may enter through the wound.

Collar pruning is not necessarily a safeguard against introduction of disease after cutting back. Collar pruning means a cut through the thickest and oldest part of the bush, where it is most difficult for the wound to heal over, and if a disease is introduced at the collar it cannot afterwards be removed by pruning.

Cutting back is too often performed as a matter of routine ; or worse, as the only method of restoring a weak bush to health. Many areas of tea which are considered to require cutting back on account of weakness or decreasing yield are really in need of nursing and feeding because they are suffering from the results of their last attack of cutting back.

Tea is often cut down because it is weak, and nothing done to remove the cause of the weakness. As soon as the production of dark green vigorous shoots following the stimulus of cutting has ceased, the original cause of weakness again asserts itself with increased force on a bush further weakened by cutting. In bad cases, the stimulus of cutting fails to produce even the first vigorous shoots. The worst tea one sees is usually tea which, being originally poor, has been further weakened by cutting, and has soon afterwards been cut down again.

Cutting down, by itself can only effect any improvement either because disease of the stems is thus removed, or because good growth is given after the cutting. In the latter and more general case, greater improvement, with less loss of crop, could have been produced by allowing good growth by sparing plucking, without cutting down, particularly if cultivation and manuring were improved also.

Cutting down, then, has no virtue in itself and introduces causes of danger to the bush. It should therefore be avoided when possible. The cause of mere weakness or of decreasing yield should be traced, and the cause removed ; while the presence of diseased branches should be treated by the clean removal of the diseased branches only ; while, again, the conditions which render the bush susceptible to the particular disease should also be improved.

There are however cases when one step towards the simplest method of restoring a section to full yield is some degree of heavy pruning. Such

cases are most commonly met with on old tea, generally because the removal of single branches as they became diseased, and the clean removal of snags which introduce disease, have not been properly dealt with during the ordinary routine of pruning, while preventive measures such as spraying and correct manuring have probably been neglected, also.

CONSIDERATIONS REGARDING SEVERITY OF CUTTING BACK

Any pruning which still leaves diseased wood in the bushes can only effect a temporary improvement in vigour at best. It is for this reason that any kind of medium pruning is in such disfavour with a very large number of planters. The school which favours making a clean sweep of everything by cutting right down to the ground is strongest in Upper Assam where not only is the climate relatively very favourable to this operation, but bushes thought to require it are generally in better condition than, for example, on a hot droughty exposed teela in the Surma Valley. Yet even in Upper Assam ten per cent of good bushes may be expected to be lost after collar-pruning, while the loss is very often twenty per cent, and in bad seasons forty per cent of deaths is not uncommon. On account of this possible heavy loss a very large number of men condemn collar-pruning altogether. Between these two extremes the truth lies.

Since a bush is entirely dependent on its leaves to provide food, a bush deprived of its leaves can only throw fresh shoots by drawing upon ready-formed reserve food material in its stems and roots. Until fresh leaves are formed the whole life-cycle ceases. The young fine rootlets of a collar-pruned bush die and have to be re-grown after a fresh food supply is established from new leaves grown out of reserves. Such reserves are naturally greater in a medium-pruned than in a collar-pruned bush, and in consequence the number of deaths after medium pruning is very small indeed, both because a larger amount of stem means a larger amount of reserve food in the bush, and because from the thinner wood left, new shoots will more readily arise.

The more good clean wood which can be left on a bush, therefore, the better, but no branches carrying disease must be left, otherwise disease will spread to the sound parts of the bush. Neither is the presence of hollowed, knotted or otherwise damaged wood desirable in a bush which is to be renovated. To remove everything undesirable of this nature often does mean that the bush must be practically collar-pruned. There are however cases where only the top has become attacked by diseases, or where it is desired simply to reduce the height of a sound bush to allow more convenient plucking. In such cases it is often possible to leave a good frame composed of sound branches, by cutting the bush across at a convenient height and removing only a little unsound wood below that height.

When cutting back the reduction of the height of the bush is always a consideration, and for that reason it is hardly sound to make the cut any higher than about eighteen inches or the bush will too soon be over-high again. On many bushes a cut at eighteen inches would leave little more than a single stump which is most undesirable. It is not worth while to medium prune unless something of a frame is left, and for this reason, also, the only method of cutting back a bush may be practically to collar-prune it.

In practice then, either because there is no frame sufficiently near the ground or because the frame is composed almost entirely of diseased branches, the only sound method of cutting back a section is often very nearly to collar-prune most of the bushes. It is urged however that whenever there is a chance of preserving a good sound frame, it should not be neglected.

To cut a bush to the collar leaving nothing, when some good clean branches might have been left, is a serious error, because the percentage of deaths is unnecessarily raised. Particularly is this so when fine young shoots near the collar might have been left, so that one could get the advantage of removing the whole of the old wood while leaving shoots to ensure that the plants will live, and come away much more quickly and strongly than if no shoots had been left. If there are no such shoots then older thicker wood may often be left, so long as it is sound. From such branches shoots will arise much quicker than from the stump, even if the branch is so cut down that no leaf remains on it, but it is of course an advantage to leave leaf if possible.

When such 'Kickers' are left there is a tendency for them to become attacked by red spider and other diseases. It is therefore sound to cut these away, or down to good wood, after they have done their work, that is when new shoots have arisen from the stump. In leaving 'Kickers,' also, care should be taken that if they are strong then kickers should be left on each side of a stump, or a one-sided bush may be grown, and that side of the stump from which no shoots arise will rot, and eventually so will the whole bush. If only one strong kicker is left, it must be cut away very early.

Both opposite opinions (1) that tea should never be collar-pruned, and (2) that collar-pruning is the only satisfactory method of cutting back, contain germs of truth, but both err in going to extremes. Every individual bush should be treated on its merits, but in practice it is necessary to give a fairly simple order.

If it is decided that there are frames worth saving, then an order may be given to cut down to the particular height which suits the average bush best, with the proviso that all diseased branches must be removed cleanly, while some few bushes may have to be collar-pruned.

If it is decided that it is necessary to cut right down, then that order may be qualified by ordering that young shoots or good branches from near the collar must be left. Both jobs require good supervision, but it is remarkable how soon good coolies grasp the principles, and apply them.

In addition to the points already referred to a few others may be briefly mentioned.

LEAVING SHOOTS

As far as possible one should aim at the avoidance of snags. If a branch can be removed flush with a shoot, however poor the shoot may be the remaining wood is preserved from death by the flow of sap induced by the presence of the shoot; and if the shoot or a new one arising just under it, can be induced to grow with sufficient vigour, then the cut (if made cleanly) will callus over, and leave no wound to be infected. When a cut at a certain height is ordered, it is always worth while to make the cut a little higher or a little lower if by so doing a shoot can be left.

KNOTS

If there is a knot in the branch, a new shoot often arises from the knot nearest to the cut. For this reason many planters are in favour of making

the cuts through knots, and in that case a large number of new shoots do arise from the top of the cut shoot. The knot however is a very hard thick piece of wood, and a clean cut through it is very difficult to make. A cut through a knot also is difficult to heal even with a shoot to help it, neither is a shoot from a cut knot usually as good as a shoot from straight wood or even as a shoot from the next lower knot. It is probably better therefore to attempt to cut below knots, and to try to leave straight wood.

PROTECTION OF WOUNDS

The chief cause of trouble after cutting back is the entry of fungus diseases after cutting back. Tar, and fungicides such as Bordeaux paste, have been used to prevent entry of disease at the cut surface. Unless, however, a shoot arises close to the cut, the wood is bound to die back to the next shoot, and disease will eventually attack the dead snag. The only perfect protection is a natural callus growth over the wound, and this can only be obtained if a shoot arises near a clean cut on a vigorous bush. The vigorous bush must be obtained by previous soil treatment and by sparing plucking.

The difficulty, of course, is to get the shoot to arise near the cut. On old hide-bound stems, particularly if cut before a dry spell, the highest new shoot generally comes away some distance below the cut, leaving the wood above the shoot to die. If, however, the shoot will not come at the cut, the cut can always be made at the shoot after a shoot has grown. The second cut is best made by going over the pruning a second time as soon as shoots have come away after the first cutting back. This of course greatly increases the labour of pruning but it is better to do a small area well, than a large area badly.

If however the snags are left for one year only, little harm is done, but tea after medium pruning should never be left unpruned, unless the snags are first removed either immediately after cutting back, or at the end of the year following the cutting back.

In the case of a cut right down to the ground, the cut is automatically made very close to the place where new shoots will arise, and therefore if the stump comes away quickly it will always start to callus. Shoots from collar-pruned bushes however are often very slow in coming, and meanwhile the exposed stump dries, bark cracks away from it, and the wood starts to die back. Disease then enters, and even though shoots arise from lower down, the life of that bush is often a short one. The higher the stump is out of the ground, the more likely it is that shoots will arise from it, but it is also more likely that they will arise below a piece of dead wood which will become diseased.

Shoots arise much less readily from roots than from stems. It is therefore not sound to fork away soil before cutting and cut through the root itself, but if half an inch of stem is left it is sufficient on an old stump. The cut will then be about at ground level where the bark will be kept moist by the soil, and after the stump has come away it will become covered by soil, which will assist the continued growth of the protective callus, by keeping it moist, while the layer of soil is itself a protection against fungus attack. Stumps cut to the ground and lightly covered with soil usually callus well, and throw good shoots also particularly in sandy soils.

Shoots however do arise more freely if the stump is exposed by forking away the soil. This forking is often overdone and then results in drying not only of the stump but of the roots also. Only an inch or so of stump should be exposed at most. In this case the cut bark is exposed to

drying. It will however callus splendidly under a paste, of fresh cattle manure with a little soil, spread over the cut, particular attention being paid to the covering of the cut bark. This paste may be applied also with advantage to cuts on thick branches.

It is hardly necessary to remark that cuts should be made as smooth as possible, to give them the best chance of callusing over. Because, once upon a time, daos were used for heavy pruning, it cannot be argued that the nature of the cut is of no importance. Kukris are still occasionally used with success for collar-pruning, but the instruments are sharp and the men skilled in their use.

For cutting to the collar or for heavy branches, a sharp saw is the best instrument, and it should leave the bark unbroken at the edges. The practice of bevelling the edges of a saw cut with a knife is a bad one. The wood, above the level to which the bark is cut, is almost certain to die and to hinder callus formation.

PREPARATION FOR CUTTING BACK

If cutting back is to fulfil its purpose of replacing old and diseased branches by vigorous new ones, the bush must be got into vigorously growing condition before it is cut down.

No treatment, of course, can cause dead wood to throw new shoots, nor will treatment produce good shoots from branches so diseased that they ought to be cut away; but treatment should be able to produce good shoots at least from the parts of bush which will be left after heavy pruning.

If a bush is so weak as to carry no good shoots, then to heavy prune it will only further weaken it. The cutting back of such a bush should be postponed till it is in better condition. If treatment applied with this object is found to make heavy pruning unnecessary, all the better; but at any rate such cultivation, manuring, and sparing in plucking must be applied as will bring the bush into condition to come away well after cutting back. Neglect in these respects before the cutting, cannot be atoned for by good treatment after the bush is cut back. It is clear that a bush cannot take advantage of raw material in the soil, if it has few leaves or none to manufacture it into plant food. A cut-back plant can only take advantage of good after-treatment when sufficient leaves have been grown out of reserves produced in the bush before it was cut down. There are, for examples, cases on record where a section has been cattle-manured and a part cut down immediately afterwards which came away much less well than another part carrying similar tea which was cut down a year after the manure had been applied.

MANURING BEFORE CUTTING BACK

As regards manuring; twenty tons of cattle manure per acre, a year before cutting back, is an ideal preparation, and one that is usually sufficient by itself. Failing that, a mixture of artificials to suit the soil combined with green cropping may be used.

The very common method of relying on a single standing green crop to be trenched in, in alternate lines, is not a good one. The tea is too liable to suffer in vitality, even if only temporarily, from the presence of too dense a crop of green manure for so long, and the cutting of the roots by trenching also introduces another possible cause for loss of vitality. To cut down and trench at the same time is particularly objectionable, since

the bush is then damaged at both ends at the same time ; but a weak bush may not recover from trenching even after a year. Nor is it desirable to bury all the manure on one side of a bush only. If high growing crops which occupy the soil for a year are preferred, then it would be better to sow the first green crop four years before cutting down is intended, trench in the first crop three years before cutting back, sow another crop on the trenched lines, and trench in the second crop two years before cutting back. For the year before cutting back a complete mixture may be used. Unless however there is a definite mechanical obstruction in the soil which is hindering growth, deep trenching is not recommended for tea to be cut back, although shallow trenches may be used as convenient for burying green crops.

It is of course impossible to lay down rules for the amount of manuring necessary before cutting down. If after one year's treatment the condition of the tea still appears too poor, then treatment should be continued.

PLUCKING AND PRUNING BEFORE CUTTING BACK

If the frame is to be cut away there is no object in spending money and time on expensive pruning. To leave the bush unpruned however may be to expose it to such a strain as will weaken it. A good system in general is merely to cut across without any cleaning out at all. The wood left, also, may be rather longer than is usual on ordinary top-pruned tea. A good crop will then be obtained, without undue exhaustion of the bush, if it is in good health.

In the case of a bush which is to be cut down because it is weak, or becoming weak, it should naturally not be exhausted by any attempt to get a large crop before cutting down. No rules, of course, can be suggested, but plucking should be lighter according as the bush is weaker, and in extreme cases it is advisable to leave weak bushes unplucked altogether.

SOIL TREATMENT AFTER CUTTING BACK

When tea prices are good, it pays to manure any tea every year. Whatever prices may be, however, it is essential that a cut-back bush should be fed, while it is rebuilding its frame. No rules applicable to all soils can be given, but manuring must vary according to the soil. Complete mixtures accompanied by green manuring are required. While 'pruning mixtures' should nearly always provide potash and phosphoric acid, it is unsound to rely on these only. Nitrogen also is necessary to produce good stems and leaves to feed them.

Cultivation also must not be neglected. This is an important matter when considering the advisability of cutting back. While bushes which provide good cover may keep fit on three or four rounds of light hoeing, such treatment on a cut-back area may ruin the tea by letting it go under jungle.

One or two rounds of forking around the collar will be necessary, while if light hoeing is relied upon to keep down jungle when it is growing vigorously, a hoe as often as every three weeks may be advisable until the bush is big enough to provide cover.

If increased expenditure on cultivation and manuring cannot be afforded, then cutting back should be postponed until it can.

Collar-Pruned areas on suitable land however are particularly suitable for buffalo-cultivators.

(To be concluded next week.)

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending Sept. 11, 1926	January 1 to Sept. 11, 1926	January 1 to Sept. 11, 1925
(A) TEA (WEEK ENDING SEPTEMBER 11, 1926)				s. d.	s. d.	s. d.
(a) Anamallais—			N. India.	1 7.35	1 8.35	1 4.85
			S. India	**1 5.02	††1 7.99	††1 5.50
			Ceylon...	1 6.50	1 8.56	1 7.41
			Java ...	1 2.30	1 4.45	1 0.63
			Sumatra.	1 2.25	1 5.20	1 4.15
			Nyassa-land.	1 4.33	1 5.71	1 1.08
			Total ...	*1 6.34	†1 7.99	†1 5.35
(b) Central Travancore						
Injimullay ...	65	1 5				
Glenmary ...	135	1 4 $\frac{3}{4}$				
Cheenthalaar ...	110	1 4 $\frac{1}{2}$				
Munja Mullay ...	105	1 4 $\frac{1}{2}$				
Thunga Mullay ...	100	1 4 $\frac{1}{2}$				
Munja Mullay ...	100	1 4 $\frac{1}{4}$				
Nellikai ...	100	1 4 $\frac{1}{4}$				
Pambanar ...	49	1 4 $\frac{1}{4}$				
Pasumalai ...	93	1 4				
Thengakal ...	72	1 4				
(c) Kanan Devans—						
Yellapatti ...	24	1 7				
Sevenmallay ...	43	1 6 $\frac{3}{4}$				
Nullatanni ...	110	1 5 $\frac{3}{4}$				
Kalaar ...	82	1 5 $\frac{3}{4}$				
Yellapatty ...	66	1 5 $\frac{3}{4}$				
Chunduvarrai ...	156	1 5 $\frac{1}{2}$				
Letchmi ...	105	1 5 $\frac{1}{2}$				
Vagavurrai ...	90	1 5 $\frac{1}{2}$				
Guderae ...	75	1 5 $\frac{1}{2}$				
Nettigudi ...	56	1 5 $\frac{1}{2}$				
Munaar ...	165	1 5 $\frac{1}{4}$				
Periavurrai ...	144	1 5 $\frac{1}{4}$				
Chockanadu ...	48	1 5				
(d) Nilgiris—						
Ibex Lodge ...	75	1 8 $\frac{1}{4}$				
(e) South Travancore—						
Poonmudi ...	87	1 4 $\frac{3}{4}$				

(B) COFFEE

SPECIAL CABLE, LONDON, OCTOBER 6, 1926

'A' QUALITY 160s. MARKET NOMINAL

London Prices (seven days ending September 14, 1926)

No East Indians were offered at the Public Auctions, which were exclusively confined to Africans; but on the Continent Coorgs are reported to have changed hands at 145s.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, October 5, 1926, was 20 $\frac{1}{4}$ d. per lb.

** Based on 2,735 packages.

†† " " 124,386 "

†† " " 129,813 "

* Based on 62,555 packages.

† " " 2,249,449 "

† " " 2,110,186 "

(b) *Précis of Reports on the London Market received on Monday, October 4, and covering the seven days ending Tuesday, September 14 :—*

1. *Tea.*—The South Indian average for the week ending September 11, as shown on the previous page, was $\cdot 19d.$ above that of the previous week, and the weakest feature of the market was plain medium kinds. Common and commonest registered an advance in price, while fine liquoring and tippy teas remained quite firm. The Indian Tea Association estimates that the crop yield to the end of August 1926 was $199\frac{3}{4}$ million pounds against $194\frac{1}{2}$ million pounds and 174 million pounds for respectively the corresponding periods of 1925 and 1924.

2. *Rubber.*—Stocks increased by 1,247 tons to 32,011 tons during the seven days under review, but the market remained steady; fluctuations being confined to $\frac{1}{8}d.$ on either side of the closing price for the previous week. The 'spot' quotation on the 13th was $8d.$ and there were premia of $\frac{1}{4}d.$, $\frac{3}{4}d.$, and $1\frac{1}{4}d.$ respectively on contracts for delivery during October-December; January-March; and throughout the whole of next year.

3. *Coffee.*—On September 14 the London stocks of African, Indian and other kinds respectively were given in bags as 21,882, 11,412, and 76,115; as against 28,420, 35,214, and 115,192 on the corresponding date last year.

II. Weekly Rainfall Statement

From Sunday, September 26, 1926 to Saturday, October 2, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	N.R.	61·89	N.R.	19. Naduvattam	0·02	90·01	90·03
2. Kalthuritty.	0·80	96·17	96·97	20. Coonoor ...	0·03	19·02	19·05
3. Tenmalai ...	1·74	96·89	98·63	21. Kotagiri ...	...	31·67	31·67
4. Mundakayam.	3·34	126·93	130·27	22. Ootacamund	0·07	35·44	35·51
5. Peermade ...	2·33	160·90	163·23	23. Yercaud ...	2·42	33·70	36·12
6. Twyford ...	3·50	176·77	180·27	24. Devala ...	2·26	136·33	138·59
7. V'periyar ...	0·54	73·08	73·62	25. Gudalur ...	0·06	74·27	74·33
8. Kalaar ...	2·03	181·91	183·94	26. CALICUT ...	N.R.	114·21	N.R.
9. Chittuvurrai	0·11	30·41	30·52	27. Kuttiyadi ...	N.R.	N.R.	N.R.
10. BODI'KANUR	...	N.R.	N.R.	28. Vayittiri ...	N.R.	176·47	N.R.
11. COCHIN	1·72	100·43	102·15	29. Manantoddi.	0·27	99·17	99·44
12. Mooply Valley,	1·76	121·17	122·93	30. Billigiris ...	1·82	37·36	39·18
13. Pachaimalai.	0·52	110·12	110·64	31. Sidapur ...	0·15	67·87	68·02
14. Mudis ...	0·90	215·88	216·78	32. Pollibetta ...	1·01	90·45	91·46
15. Nell'pathy...	N.R.	86·11	N.R.	33. Somwarpett.	0·04	66·49	66·53
16. POLLACHIE.	...	20·55	20·55	34. Ballupete ...	0·10	62·26	62·36
17. Manjeri ...	0·14	120·95	121·09	35. MANGALORE	3 00	98·92	101·92
18. Nilambur ...	1·14	110·05	111·19	36. MADRAS ...	0·98	9·56	10·54

W=During the week.

P=Previously. N. R.=No return received.
(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(*continued*).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod and Co. :—

III. Madras Market Report

(*For the week ending Thursday, October 7, 1926*)

(A) EXCHANGE

The market again has been very quiet and all rates are a shade easier, principally due to lack of business. There has been a certain amount of Bullion remittance in Bombay which has not strengthened the market. On the other hand there is no demand at all for remittance in Calcutta, and the latest telegrams speak of good Exports there. At the same time there are no Bills actually making as yet, and there are no Bills offering in Bombay. The Exchange rates quoted to-day are as follows :—Banks selling T.T. on London 1s. 5 $\frac{1}{8}$ d. first half and 1s. 5 29/32d. second half October, 1s. 5 15/16d. first half and 1s. 5 31/32d. second half November, 1s. 6d. first and 1s. 6 1/32d. second half December, 1s. 6 1/16d. January/February, 1s. 6 1/32d. March, 1s. 5 31/32d. April, 1s. 5 15/16d. May and 1s. 5 29/32d. June/September. There are buyers of three months credits at 1s. 6 7/32d. October, 1s. 6 $\frac{1}{4}$ d. first half and 1s. 6 9/32d. second half November, 1s. 6 5/16d. first half and 1s. 6 11/32d. second half December, and 1s. 6 $\frac{3}{8}$ d. January/March. We are looking for rather lower rates temporarily, however, and we think the Banks are open to temptation for near or slightly Forward Bills.

(B) MONEY

The market continues to be very easy, and we quote Call money 2 per cent, six months 3 to 3 $\frac{1}{2}$ per cent and twelve months 4 per cent, and there are no borrowers for short deposits. The Imperial Bank of India rate remains unchanged at 4 per cent and the percentage of cash to liabilities at 49.79 is rather higher than 49.63 a week ago. All anticipations that the English Coal Dispute weeks ago would be over very soon have proved incorrect, but it does look as though a settlement must be close at hand now. Foreign Exchange rates show the Franc very much better at 168 9/16 against 173, and the Pound Sterling is again a small shade worse at 4.85 $\frac{1}{8}$ as compared with 4.85 3/16.

IV. Selected Madras Market Quotations

For the week ending Wednesday, October 6, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks (Rs. 10)	10½	...
Bank of Mysore (Rs. 100)	160	...
Indian Banks (Rs. 100) Rs. 50	66	69
Indian Banks (Rs. 100) Rs. 10	13	13½
Central Bank (Rs. 50) Rs. 25	26½	27½
Imperial Bank of India (Rs. 500)	1450	1460
" " " (Rs. 125)	350	360
Chartered Bank (£5)	£ 19-12-6	£ 20-7-6
Eastern Bank (£10) £5.	£ 6	£ 6-5-0
Mercantile Bank (£25-A) £12½	£ 28-15-0	£ 29-15-0
" " (£25-B) £12½	£ 28-15-0	£ 29-15-0
" " (£5-C) £5	£ 13	£ 13-10-0
National Bank (£25) £12½	£ 46-5-0	£ 47-15-0
P. and O. Bank (£10)	£ 10-2-6	£ 10-12-6
MILLS		
Bangalore W. C. and S. Ordy. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	93	...
Buckingham and Carnatic Ordy. Rs. 100	205	...
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	121	123½
Coimbatore Rs. 100	174 c.D.	...
Coimbatore Mills Rs. 85 ... ..	...	...
Gokaks Rs. 100	110	115
Maduras Rs. 100	400	...
INDUSTRIALS		
Deccan Sugar Ordy. Rs. 500	855	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100 ... ..	...	105
E. I. Distilleries and Sugar Factories Ordy. (£0-16-0) ... ..	...	17s. 4½d.
E.I.D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	65	71
Malabar Match (Rs. 10) Rs. 7	1	1½
Marshall Sons & Co. (Rs. 10)	4	4½
Singareni Collieries, Rs. 10 ... ..	...	10
W. E. Smith Ordy. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	...
Spencers Ordy. Rs. 100	150	...
Spencers 6 per cent. Prefs. Rs. 100	96	97
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	...
Tata Iron and Steel Ordy. (Rs. 75)	68	60
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	73	76
United Breweries Ordy. Rs. 75	132½	...
United Breweries 6 per cent. Prefs. Rs. 100	90 x.D.	...
PLANTING		
Cochins Rs. 15	54	60
Eddivannas Rs. 15	30	31
Kalasas (Rs. 15) Rs. 7	6½	7½
Kinalurs Rs. 10	31	35
Kuttiadis Rs. 15	19	...
Malankaras Rs. 30	107½	110
Peermades Ordy. Rs. 10 ... ..	...	29
Peria Karamalais Rs. 15	48	50
Periasholas Rs. 10	6	7
Periyars Rs. 10	20	23
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	3	5
Thodapuzhas Rs. 10	31	32½
Thirumbadis Rs. 10	21	22
United Nilgiris Rs. 100	115	...
Vellamalais (Rs. 15) Rs. 13 ... ..	...	...

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 43] SAT., OCTOBER 23, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	709	Letters to the Editor—	
Personalia ...	710	A. Madras Hospitality ...	717
The Labour Dept.'s Census ...	712	B. Coffee Fertilizers ...	717
The U. P. A. S. C. ...	713	N. Coorg Notes ...	718
Rubber Budding ...	713	Mysore P. A. Meeting ...	719
Rugby Football ...	715	Commercial and Meteorological.	727

EDITORIAL NOTES

We are asked by the Director of the Labour Department to draw the particular attention of our Readers to the Notice appearing on Page 712, regarding the Cooly Census to be held on Wednesday, December 1, 1926.

*Cooly Census
1926*

Mr. R. B. Carrick asks us to say that a pair of Rugger Boots, thought to belong to a Planter, were left behind by one of the Players in the recent Rugger Tournament and have been handed over to the Hall Peon at the Madras Club.

Lost Property

The following 13 members of the M.C.C. landed at Karachi on the 14th instant to tour India and Ceylon:—

Mr. A. E. R. Gilligan (Capt.) (Dulwich, Cambridge, Surrey and Sussex); Mr. P. T. Eckerseley (Rugby and Lancashire); Mr. R. E. S. Wyatt (King Henry VIII School and Warwickshire); Mr. G. F. Earle (Harrow and Somerset); Mr. M. Ll. Hill (Eton, Glamorgan and Somerset); Major

*Marylebone
Cricket Club
Tour*

R. C. Chichester-Constable (Yorkshire 2nd XI); A. Sandham (Surrey); F. H. Parsons (Warwickshire); G. Brown (Hampshire); W. E. Astill (Leicestershire); W. M. Tate (Sussex); G. Geary (Leicestershire); and G. S. Boyes (Hampshire).

Our Readers will remember that Tate and Geary participated in the recent Test Match in which England beat Australia; and Gilligan, Sandham and Brown have also, at various times, played for England in Tests.

The Book of Proceedings of the Agricultural Society of Trinidad and Tobago for July 1926 states that the production of coffee in the Colony is on the increase and that coffee plants for the extension of cultivation are in great demand. During July 22,555 lbs. were exported bringing the total from 1st January to 31st July up to 339,414 lbs. The corresponding figures for rubber were respectively 20,150 lbs. and 67,889 lbs.

*Trinidad Coffee
and Rubber*

Members of the U.P.A.S.I. Buying Agency will be interested to learn that Messrs. Phipson & Co., Ltd., of 6, Apollo Street, Bombay, have now opened a Branch Office at Nos. 9 and 10, 2nd Line Beach, Madras. Messrs. P. Holt & Co., Ltd., will supervise the work of the Branch.

*Messrs. Phipson
& Co., Ltd.*

In view of the adoption, at the recent General Meeting of the U.P.A.S.I., of a resolution that the Government of India should be asked through the Government of Madras to take the necessary steps for the establishment of a Road Fund on the lines suggested by the Sub-Committee of four which had been specially appointed to investigate the matter ; we have noted with interest that Sir Basil Blackett, the Finance Member to the Government of India, in the course of an address to the Burma Chamber of Commerce in Rangoon on the 16th instant, stated that ' The Government of India were working on a scheme in the nature of a Road Fund with taxation to be collected from motorists and devoted to roads.' Although he went on to say that he could not commit himself to any guarantee that the Scheme under consideration would eventually be adopted, yet we venture to think the mere mention of it is a strong indication that it will be *un fait accompli* before very long. Though Sir Basil did not explicitly say so, the inauguration of a Road Fund would presumably mean the lowering and, in some cases, the abolition of the present abnormally high import tax on the lines recommended in Resolution 7 of the Sub-Committee of the U.P.A.S.I., referred to above ; because it is notorious that motorists in India are far more heavily taxed than they are in any Western country and that they could not sustain the incidence of any new taxation unless they simultaneously obtain compensatory relief through reductions in some of the existing taxes which they are now called upon to pay.

PERSONALIA

MARRIAGES

MORSHEAD—COOKE-HURLE : On Tuesday, October 5, 1926, at St. Michael's and All Angels', Colombo, by the Ven. Archdeacon Vernon Smith assisted by the Rev. G. W. Forester ; John Trelawney Morshead of Prospect, Nilgiris, to Alice Rosamund Cooke-Hurle, eldest daughter of Major and Mrs. John Cooke-Hurle, of Holne Cott, Ashburton, Devon.

MARR-BADNALL : On Tuesday, October 12, 1926, at St. Michael's and All Angels', Polwatte, Colombo ; George David Marr, of Munnar Estate, High Range, Travancore, to Irene Beaumont, eldest daughter of Mr. and Mrs. L. W. Badnall, Campden Hill Court, London.

WOOSNAM-HANDCOCK : On Saturday, October 16, 1926 ; at St. Stephen's Church, Ootacamund ; by the Rev. W. H. G. Padfield, M.A., assisted by the Rev. F. E. Dossetor, M.A. ; Arthur George Woosnam of Messrs. Peirce, Leslie and Co., Tellicherry, to Irene Doris, younger daughter of Mr. and Mrs. E. F. Handcock of Ootacamund.

ON THE SICK LIST

MRS. WADDINGTON's many friends will regret to hear that it was found necessary for her to enter the Lady Amptill Nursing Home for an operation at the beginning of this week. They will however be glad to learn that the operation was performed satisfactorily ; and that the Patient is now making excellent progress, though it will probably be some weeks before her convalescence is complete.

ARRIVALS

MR. W. G. THOM lately of Travancore, has returned from New Zealand and taken charge of the new Kerala Tea Company's Estate, in Malabar.

MR. RUSSELL CAMBRIDGE, late owner of Beddington Estate, Ootacamund, has returned from England and taken up residence at Coonoor.

MR. AND MRS. J. A. RICHARDSON and MR. D. WALLER were amongst the passengers disembarking from the S. S. *Narkunda* at Bombay. Mr. and Mrs. Richardson are proceeding to Cochin *via* Colombo by sea.

MESSRS. PAT DOVE and MURRAY WINTON have arrived in India and are working under Mr. W. H. Reed on Mavinkere Estate.

MR. W. M. SIMMONS, Managing Director of Messrs. Massey and Co., Ltd., is expected back towards the end of this month accompanied by his bride.

MR. H. L. CUTHELL, who is now on furlough, is due back on Talapoya Estate, Talapoya P.O., early next month.

MRS. R. B. CUNNINGHAM of Cotta Betta, South Coorg, is expected to arrive in Madras by the S.S. *City of Venice* about the 10th of next month.

DEPARTURES

MRS. J. B. REID and child of Pollibetta, South Coorg, will be leaving for Australia at the beginning of next month.

TRANSFERS

MR. R. BENTLEY, lately of Yemingoondies, Pollibetta, has left the district, and taken up work on Seaforth Estate, New Hope P.O., Nilgiri-Wynaad.

MR. T. RYAN, of Talapoya Estate, Talapoya, has been transferred to Jessie Estate, Manantoddy P.O.

OTHER PLANTING NEWS

We understand that the Hardwonie Estate has been sold to MR. P. D'SOUZA of Arellkan, Javali P.O.

We learn that MESSRS. H. H. TIPPETTS and W. A. REYNOLDS have left the services of respectively Messrs. The English and Scottish Joint Co-operative Wholesale Society, Ltd., and The Malayalam Plantations, Ltd.

ITEMS OF INTEREST

H. E. THE VICEROY has accepted the invitation of H. H. The Maharajah of Mysore to visit his State next July.

We notice that HIS EXCELLENCY THE GOVERNOR, after his inspection on the 12th instant of the Y.M.C.A. Rural Reconstruction Centre at Ramnathapuram some two miles from Coimbatore, concluded his commendatory remarks in the Visitors' Book with the following words:—

'I congratulate MR. VINCENT and Mr. Jayagaran and the others connected with this enterprise on its success.'

THE HON'BLE SIR CHARLES INNES, Railway and Commerce Member of the Government of India, was due to arrive in Madras this morning; and, after meeting the Agent of the M. & S. M. Railway, expects to leave on the 25th for Ernakulam whence he proceeds to Trichinopoly to meet the Agent of the S. I. Railway. He leaves that town on the 31st night for Madras and on the 2nd proxo. returns to Delhi *via* Bombay.

MR. C. W. E. COTTON, C.I.E., with Mrs. Cotton, is expected to reach Trivandrum, on his return from furlough, about the 9th proxo., and take over charge immediately from his *locum tenens* Mr. Vernon who has been acting as Agent to the Governor-General for the local Native States.

NOTICE

LABOUR DEPARTMENT, U.P.A.S.I.

Cooly Census

To be held on December 1, 1926

The under-quoted letter and duplicate census forms were forwarded last week to the Superintendents of all Estates which subscribe to the Labour Department.

If any Estate, which is a subscriber to the Labour Department has not received this letter and Census Forms, application for them may be made to the Honorary Secretary of the Local District Planters' Association, all of whom have been supplied with a few spare forms in case they are needed to replace any which may not have reached the addressees.

Mangalore,
October 15, 1926.

F. W. WINTERBOTHAM,
Ag. Director, Labour Department,
U.P.A.S.I.

To

THE MANAGER,
_____ Estate,

COOLY CENSUS—1st December, 1926

DEAR SIR,

At the Meeting of the Combined Control Committees held at Ootacamund on 24-2-26 it was unanimously resolved that the Annual Census of Coolies employed on Estates subscribing to the Labour Department be held on Wednesday, 1st December, 1926.

I enclose Census Forms in duplicate, one to be filled in and returned to me, and one for you to retain the copy of your return.

I shall be much obliged if you will have the Census made on that date, 1st December, the form filled in and posted to me in the enclosed envelope that same day if possible or the next day at the latest, as the various Control Committees require all figures to be complete and tabulated before the 15th of that month to facilitate the preparation of the Labour Divisional Budgets.

I trust you will be so good as to see that the return is made as accurately as possible. A space for 'Remarks' is left for you to make any note or suggestion which will be useful to the Control Committees in arranging for a redistribution of agencies in the new season's budget, or any special requirements, as Control Committees are all anxious to do everything that possibly can be done for subscribers.

OFFICE OF THE AG. DIRECTOR,
LABOUR DEPARTMENT, U.P.A.S.I.,
MANGALORE,
October 15, 1926.

Yours faithfully,
F. W. WINTERBOTHAM,
Ag. Director.

U. P. A. S. I. SPORTS CLUB

A. Revised List of District Representatives

ANAMALAIS—Mr. C. W. Mayow, Monica, Valparai P. O.

* CENTRAL TRAVANCORE—Mr. G. P. Farley, Thungamallay, Vandiperiyar P. O.

COORG—Mr. J. F. Sprott, Hallery, Mercara P. O.

KANAN DEVANS—Mr. J. S. Hawkins, Nettigudi, Mattupatti P. O.

* MUNDAKAYAM—Mr. H. B. Macpherson, Kokayar, Mundakayam P. O.

MYSORE—Mr. H. H. English, Kurkenmutty, Santaveri P. O.

NILGIRIS—Mr. A. K. Weld Downing, Frith Hall, Hulical P. O.

NILGIRI-WYNAAD—Mr. G. W. Fulcher, Woodbriar, Devarshola P. O.

SHEVAROYS—Mr. E. L. Poyser, Mountain View, Yercaud P. O.

* SOUTH TRAVANCORE—Mr. A. P. D. Lodge, Isfield, Kalthuritty P. O.

* WEST COAST—Mr. C. E. M. Browne, Palapilly P. O.

WYNAAD—Mr. B. M. Behr, Auda Tode, Perindotty P. O.

* The Joint Secretary for these four Southern Districts is Mr. W. F. Inman of Carady Goody, Vandiperiyar P. O.

B. Subscriptions for 1926-27

It is proposed to publish a list of 1926-27 Subscribers in *The Chronicle* next month; and with a view to making it as complete as possible all Members who have not already done so should send in their subscriptions IMMEDIATELY to the District Representatives of the Club.

District Representatives, on their part, should endeavour AT ONCE to enroll as Members any new arrivals who have been elected Members of their D. P. A.

C. Venue of 1927 Meet

It has been provisionally arranged to hold the Planters' Week at Ootacamund from Friday, February 18, 1927, to Sunday, February 27, 1927, both days inclusive and the services of the Royal Tank Corps Band have been secured for the Dances.

WOODBRIAR, DEVARSHOLA,

October 16, 1926.

G. W. FULCHER,

Honorary Secretary.

RUBBER

BUDDING ON A COMMERCIAL SCALE

BY

R. A. TAYLOR, B. Sc.,

Physiological Botanist, Rubber Research Scheme, Ceylon

(Concluded from page 703, issue of October 16, 1926)

BUDDING IN THE FIELD

Points in favour

Here the stumps are planted out in their permanent situations before the bud is affixed and the unavoidable check to growth is past.

There is no shifting of the plants after budding with the attendant risks of loss through injury.

The stocks can be selected before being taken from the nursery, only the well-grown plants being used. (I do not advise budding on to stocks raised by the seed-at-stake method as no such selection is then possible.)

Points against

The actual budding and the subsequent inspections are more difficult and laborious, and the rebudding of any failures will take a much longer time.

It is more difficult to have the whole plantation in such a high state of cultivation that the stocks will be as vigorous as those growing in a nursery.

How to Bud

PREPARATION OF BUDDING TAPES

The tapes used to bind up the point where the bud has been fixed must be prepared beforehand. Strips of thin cloth about 1 inch wide are soaked

in a mixture of 2 parts of resin, 1 part bees wax and 1 part tallow. The resin is ground up fairly finely and melted along with the other ingredients in a kerosene tin over a fire. When thoroughly mixed the strips of cloth are soaked and then rolled on to sticks for ease in handling later.

BUDDING KNIFE

The knife should have a strong sharp blade and also be supplied with the bone spatula which can be used for levering up the bark.

COLLECTION OF BUDWOOD

The budwood is brought to the scene of operations as pieces of branches cut to suitable lengths. If a considerable distance has to be covered, the severed ends can be sealed with tallow, to prevent desiccation. These lengths can be packed in boxes with grass or other packing material to prevent damage.

PREPARATION OF STOCK FOR THE RECEPTION OF THE BUD

A small rectangular piece of bark is removed from the stock at a height of not more than 2 inches from the ground. The size of the piece removed is regulated by the use of a small metal mould round which one clean cut is made down to the wood. The bark is then levered off with the spatula end of the knife, the greatest care being taken that nothing is allowed to touch the exposed cambium on the stock.

REMOVING THE BUD AND ATTACHING TO THE STOCK

The bud is removed with a piece of bark attached, of such a size as to fit exactly into the place prepared on the stock. A mould is also used here, and this mould is slightly smaller than the other, and has a hole in the centre. The mould is laid on the budwood so that the bud can be seen through the hole and a sharp cut to the wood is made round three sides. The piece of bark containing the bud is then removed from the branch by a sharp cut from above downwards. This usually removes a piece of the wood which can easily be detached. Care is also taken here that nothing is allowed to touch the cambium of the bud before it is applied to the stock. The bud with the piece of bark is then fitted into the stock, care being taken to insert it the right way up. The whole is then bound up tightly with the prepared tape, beginning from the bottom.

If desired, the piece of bark need not be completely removed from the stock; the cut need only be made round 3 sides of the mould leaving the piece unsevered at the base. The bud can be inserted behind this and the flap folded over it. A certain amount of protection against desiccation is thus afforded.

It is essential that the wrapping be airtight as any drying out will cause a failure.

SUBSEQUENT EXAMINATIONS

In 14 days' time the bandage may be removed and the first inspection made. If the attached bud is still green the operation has been successful. If still green after a month, the stock is cut off about 2 inches above the point of union and the wood tarred.

POINTS TO BE GIVEN ESPECIAL CARE

1. Make sure that the bud does not remain attached to the wood.
2. AVOID TOUCHING THE CAMBIUM, EITHER ON THE STOCK OR ON THE PIECE OF BARK CONTAINING THE BUD.
3. It is most important that no adventitious buds on the stock be allowed to develop. This is a fairly common occurrence where the bud has failed to 'take' and, unless closely examined, the shoot produced may very easily be mistaken for the budded shoot.

'The Tropical Agriculturist' (Ceylon).

RUGBY FOOTBALL

A Time of Change and New Tactics

THE SPEAR-POINT ATTACK

CLIPPING OUR WINGS

In a modest but very practical 'Lecture on Rugby Football,' Mr. P. C. Adams, a member of the Rugby Union Committee, whose enthusiasm for the game is only equalled by his devotion to his old school, King Edward's, Birmingham, had some interesting things to say on what he conceives to be the lines along which Rugby will develop.

In Mr. Adams' view the day of the fast wing three-quarter is waning, and 'speed is going to be concentrated in the forwards and the centre players behind; the wings will be there for defence, and will be chosen for the same qualities as are required of first-class full-backs to-day.' He goes on to state 'the orthodox four three-quarter movement is a tedium to watch, and nearly always ends in nothing.'

When the New Zealand team was over here two seasons ago, one of the chief differences noticeable between their back play and that of players in the home countries was that while our men concentrated on making openings primarily for the wing three-quarters to score, the All Blacks attacked from the centre. For this latter method of attack the New Zealand formation is peculiarly adapted—though which is cause and which effect it is not easy to decide—in that the backs form a spear-head with which to thrust home their raids on their opponents' territory. The point of the spear-head is at the single half-back in position at the base of the scrum. Behind him are the two five-eighths, and, in the third line, the three three-quarters. In practice the spear-head often became flattened out, but, even so, the formation was more suitable for making frontal attacks than that of British teams with their three-tier arrangement of scrum-half, fly-half, four three-quarters. This contention is borne out by Mr. T. A. Fletcher, of the New Zealand Rugby Union, who wrote in the *Rugby Football Almanack*: 'We believe that the attack must be delivered frontally and not laterally', and is supported by the fact that A. E. Cooke, who played most of the time as a centre three-quarter, was the second highest scorer of tries in the team, obtaining nineteen tries in his twenty-three matches. A. H. Hart, who scored twenty tries, was a wing three-quarter, but he did not score so consistently as Cooke.

THE DECIDING FACTOR

There is a good deal of truth in what Mr. Adams says about the decay of wing three-quarter play, as anyone must admit who will look back on the matches of the last few years and recall *not* the number of tries obtained by wing three-quarters, but the number of occasions on which movements designed to give wings openings have broken down. More often than not, it is the cut-through by a centre or fly-half which has been the deciding factor in a close struggle. The heyday of the wing three-quarter was when forwards were comparatively slow, when the quick break-up of the scrummage was almost unknown, when half-backs were regarded principally as *feeders* and originality *qua* cutting-through was apt to be decried as selfishness.

It has become a platitude that 'on-lookers see most of the game,' yet how few on-lookers, even expert ones, much less players, seem to have realized how stereotyped our methods of attack have become; we seem unable to get away from the obsession that the sole purpose of any attacking movement by the backs must be with the purpose of enabling a wing to score! To quote Mr. Adams again—'Our game is going to progress by the advance of team play and the sinking of the "star."'

Now what is the reason for this 'clipping' of our wings? They themselves are not so much to be blamed for it, as those who remember how C. N. Lowe would make openings for himself and dash through the narrowest of gaps for tries must admit; it is more the fault of centres and stand-off halves who seem to have forgotten for the most part how to *run straight*. There is scarcely a match played to-day, even of the highest class, in which we do not see glaring examples of wings being bored to the touch-lines by their inside men. When the final pass comes to the unfortunate wing, he is usually too circumscribed to do anything except kick along the line and follow up—Rugby's greatest gamble—or pass back again to the centre. Failure to run straight is bad enough, but when it is combined with selfishness and hanging on to the ball too long it is fatal.

It is sometimes argued that straight running is prevented by the modern practice of defending three-quarters taking up a very forward position so that they are on top of the opposing three-quarters almost as soon as the ball reaches them. This is partly true, and is, I believe, a direct result of half-backs and wing-forwards being allowed too much latitude and playing so nearly off-side as to make it almost impossible for the scrum worker to get the ball out cleanly when it is heeled. It will be interesting to see what effect the new Welsh rule will have in this direction, whether, in fact, the greater opportunities for opening up the game by the scrum-workers will react on the whole back division and enable them to run straighter and make more ground before passing.

CUT THROUGH

I hold no brief for the New Zealand formation *per se*, but I do believe that the spear-head frontal attack is worth exploring far more than is done at present; logically it is sound, for it is directed where there is most room to move and, for this reason, it is more difficult to concentrate defence to meet a frontal attack than one from a wing. The theory that the wing is the weakest spot, and therefore the one on which a final thrust should be made is a fallacy, for the hard-and-fast restriction of the touch-line is an overwhelming handicap for the development of an attack, and makes it easy to defend by converging on it from all points.

Spectators, of course, dearly love the brilliant dash along the touch-line; they like the thrill and suspense associated with the doubt whether the runner will get through or be pushed into touch; but most old players will agree that there is nothing more delightful to see than a clever-cut-through and dash from the centre such as W. J. A. Davies, Eddie Myers, or L. P. Corbett used to treat us to in recent times.

LETTERS TO THE EDITOR

(*The Planters' Chronicle is not responsible for its Correspondents' views.*)

A. The Hospitality of Madras

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

U.P.A.S.C. Cricketers and Rugger men, who were privileged to 'make' Madras during 'Rugger Week', will not forget it in a hurry. The magnificent hospitality shown us by our various hosts, and Madras generally, beggars description. Although we suffered defeat in both games, Cricket and Rugger, who will forget our skipper's winning smile after lunch the day following our game with the 'Lancs.'? Our Honorary Secretary's reputation as 'the confirmed grouser' also received a nasty set back.

I was one of the unfortunates who left before the Rugger dinner. From the intensive training put in by those who remained—backed by rigid coaching on the part of the Madras hosts—I feel sure those who were there, put up a good show at that function.

Our thanks to the good people of Madras—and to Carrick, the Rugger Secretary—for their splendid bandobust.

SANTAVERI,
October 15, 1926.

Yours, etc.,
'DOUDLY DEFEATED.'

B. Coffee Fertilizers

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

I have recently had sent me a Pamphlet relating to 'Hints on Profitable Cultivation of Coffee', issued by the Chilian Nitrate Committee, Calcutta, on page 4 of which the following regarding manuring appears:—

'In deciding the amount of fertilizers to be applied we must bear in mind that Coffee requires a lot of Nitrogen, but less Potash and still less Phosphoric Acid. In fact it has been calculated that one year's crop removes 21 lbs. of Nitrogen, but only 4 lbs. of Phosphoric Acid per acre from the soil.'

Now, since I began manuring in a rational manner in 1911, after having had my soil analysed and submitting the analysis to Mr. R. D. Anstead, it has always been laid down that we had too much Nitrogen in our manures, and too little Phosphoric Acid and Potash. The usual general Fertilizers advocated now a days contain something like 4-5 per cent Nitrogen, 11-12 per cent Phosphoric Acid and 4-5 per cent Potash, and I have been told that it was advisable to increase the Phosphoric Acid and Potash against the 5 per cent Nitrogen. Since I have manured on this basis, my crops have increased greatly.

I wonder if our Scientific Officers have anything to say on this point. The Article reproduced in the Pamphlet is from *Commerce and The Indian Agriculturist*.

HOSCOTTAY,
Somwarpett,
October 17, 1926.

Yours, etc.,
P. M. WILKINS.

DISTRICT NOTES

N. Coorg

DEAR MR. EDITOR,

I have been away for the past week, and hence have been unable to send you an account of the Jumboor Paper Chase—but to put it briefly the whole show was a success from A to Z.

As time is short, I have told my little girl to send you a letter all about it. I am sure it will interest the more juvenile of your readers.

‘YOUR HONORARY CORRESPONDENT’

October 2, 1926.

MY DEAR UNCLE EDITOR,

My Daddy is so busy that he has asked me to write and tell you all about the very jolly day we spent when Jumboor had their Paper Chase last Monday, September 27.

Oh! Uncle it was gaudeous. There was heaps of lemonade and ginger beer when we got there, and every one was dressed in their Sunday best.

The men that rode their horses are so nice, Uncle. I wish I was a boy Uncle—but mummy says I can't be—Oh! Uncle dear, do ask her if I can be one, next time you come to stay.

This time they did not play dogs chasing a fox, Uncle—they were silly last time Uncle weren't they—I don't think they looked a bit like dogs did you? This time they chased some paper. Is that why they call it a paper chase, Uncle? One man kept on blowing a trumpet—not his own—Uncle! They rode ever so fast and jumped over a big hedge with a pond on the other side—I wanted to see someone fall in, uncle, and get wet. One man came back after it was all over to try and jump it. I did not see him but I heard some one say he met Mother Earth, I did not see her, Uncle, nor, did my Daddy—he says he has met her, but does not like her.

Mr. Maurice came in first and uncle Pilly Potter came second. I was so glad.

Afterwards we had another lemonade and then we all went in our cars to Belur Club. Oh! Uncy we had a lovely lunch—Mr. Dickinson must have worked ever so hard. He has not got his wife here now, and Mr. and Mrs. Nicolls are also in England, so he laid the table. I heard one lady say ‘Isn't it extraordinary men never fuss, and somehow all goes well.’ Sundram, the old Club Butler, was there too. He is a sort of Father Christmas to all bachelor parties, Uncle—I always laugh when I see him because he looks as if he is just going to dribble but he just doesn't.

It was Mr. Dickinson's, Mr. Sprott's and Mr. Potter's party; and they kept on bringing me something to drink Uncle. I did enjoy it, and so did Daddy.

Daddy has been away, and so could not write to you this time; but he hopes to write and tell you all about the Coorg Steeple Chase which is to be on October 27th. It is *the* race of the season, and there is a lovely big cup that they bring every year. It is called ‘The Ball Memorial Cup’.

Daddy is going into Mercara from the 18th to 23rd for the Auxiliary Force Camp. To-morrow he is playing in the Belur Monthly Golf Medal Competition—but Daddy will never win it. He gets too cross with golf!

I am doing a cross-word puzzle, and I can't think what a seven-lettered word is which means ‘lack of imagination’. Do you know what it is, Uncle? What are people called when they can't follow a pretending story, Uncle?

Good-bye—we are having such lovely times here now.

Yours affectionately,
BETTY ‘CORRESPONDENT’.

THE MYSORE PLANTERS' ASSOCIATION

(INCORPORATED)

**Proceedings of a Quarterly General Meeting held at the Kadur Club, Chikmagalur,
on Thursday, September 23, 1926.**

Present

Mr. C. Lake (*Chairman*): Messrs. F. Cannon, A. C. W. Denne, S. H. Dennis, M. D'Souza, G. M. Easton, H. H. English, T. Gillespie, St. John Hunt, Captain R. B. MacQueen, Messrs. R. O. Oliver, W. B. Page, W. H. Reed, K. T. Sheshaiya, B.A., LL.B., N. C. Whitton, S. J. Wilson, E. H. Young and M. A. de Weck (*Secretary*).

Visitors

Messrs. A. Dunning and K. Pooley.
Notice calling the meeting was read.

The resolutions as passed at the last meeting having been read, the Minutes of the last meeting were taken as read and confirmed.

Election of New Members.—Proposed by Mr. Whitton and seconded by Mr. English 'That Messrs. D. J. Hewitt, W. B. Page and C. O. Commin, as representing Messrs. Tea Estates India, Limited, be elected members.

Carried unanimously.

The Secretary explained the position regarding the application for membership of Mr. S. L. Mathias, and asked that the matter might be postponed till later in the meeting to enable him to talk over the question with Mr. Sheshaiya.

The Secretary read the following :—

Report of the Executive Committee for the period May 1, 1926 to August 31, 1926

Meeting.—The 62nd Annual General Meeting was held on 20th May and a Quarterly General Meeting on 8th July.

Defaulter.—A further Rs. 100 has been collected from the defaulter, who owes Rs. 348: this leaves a balance due of Rs. 148.

S.I.P.B.F.—A printed appeal for further support to this Fund has been sent to all members. We much regret to say that so far only 17 replies out of a possible 43 have been received.

Experimental Station.—Mr. Frend of Guntanaik Estate kindly visited the Station, and made a comprehensive report thereon.

U.P.A.S.I., Annual General Meeting.—Messrs. Lake and de Weck attended this meeting as Delegates of this Association.

Roll of Honour.—The draft Roll of Honour was circulated to all members likely to be able to correct and suggest additions to it. The suggestions and amendments were forwarded to the Secretary, U.P.A.S.I.

Planting Directory of Southern India.—The Secretary to the best of his ability and the information to hand, revised and corrected the subject matter with reference to members and non-members in Mysore.

C. LAKE, *Chairman*.

W. H. REED

S. H. DENNIS

ST. JOHN HUNT

} *Members.*

Defaulter.—The Secretary said that he was glad to be able to inform the meeting that, since the report had been written, a further Rs. 75 had been received; which left a balance outstanding of Rs. 73-10-0.

S.I.P.B.F.—Mr. Oliver suggested that a paper be sent round at once to all present; in order to enable those, who had not yet answered the

Secretary's appeal, to do so now. This was done: and a further four Personal Members and five Estate Members were enrolled.

Experimental Station.—Mr. Young said that he thought it would be a good idea if copies of Mr. Frend's report were sent to all members. The Chairman suggested alternatively that he should read Mr. Frend's report at the meeting. This was accepted. The Chairman, therefore, read the following :—

Report on Visit to the Balehonnur Coffee Experimental Farm by Mr. Frend

At the request of the Association and cordial invitation of the Director of Agriculture in Mysore I visited the Experimental Farm on 24th July, 1926. The Farm Manager kindly showed me round and gave me the information given below.

AREA

- (1) Coffee approximately 17 years old. 18 acres.
- (2) Jungle ,, ,, ,, 18 ,,
- (3) Jungle acquired from Government 170 ,,

PAST SEASON

Only 15 coolies were available during the season.

Manurial Experiments.—The following experiments were commenced on the old coffee, the manure being put out in October 1925. These experiments are to be repeated for some 5 years.

(1) General Manuring, i.e., different combination of manures as well as nitrogenous, phosphatic, and potash manures being applied separately.

(2) Various nitrogenous manures, such as, oil cake, ammonium sulphates, etc.

(3) Phosphatic manures. Super Phosphate, Basic Slag, Steamed bone, etc. A certain amount of lime was also put down in certain plots.

Chief Cultivation.—Old coffee pruned in monsoon 1925. And manure forked in round stems.

FUTURE

Manurial Experiments.—Last year's, with additions.

Selection of Varieties of Coffee.—Some 30 varieties are to be planted this monsoon in plots of 40 plants of each variety in virgin land with a view to selection and breeding experiments. The nurseries, however, were disappointing.

Cardamom Plants.—It is proposed to plant some plants from Saklaspur side this monsoon in ravines.

Labour.—There are 20 coolies at present on the Farm and it is hoped to increase the gang by 5 or 10. The work is supervised by the Farm Manager and an Assistant Farm Manager.

Buildings.—The following have been sanctioned :—1 Farm Manager's house, 1 Assistant Farm Manager's house, 1 cooly line, 1 store, 1 engine shed, and a tank to supply water. Some bricks have been prepared and some of the material has been collected, the work having been given out on contract. It is hoped the following buildings not yet sanctioned will also be completed before March 1927 :—1 Laboratory, 1 Writer's house, 1 Cooly line.

Proposed from the Chair, 'That the Executive Committee's Report be adopted.'

Carried.

The Secretary then read the following :—

Report of the Delegates to the U.P.A.S.I. Annual General Meeting

MR. CHAIRMAN, GENTLEMEN,

Mr. Lake and I, as your delegates, attended the Annual General Meeting of the U. P. A. S. I. at Bangalore from August 22 to 26. There is, I think, no need for me to take up the time of this Meeting with a lengthy report. I will, therefore, only touch on those subjects of immediate interest to this Association, taking them in order as they came up at the meeting.

Pilferage of Estate Produce.—In view of the alarming increase of thefts of goods consigned to estates from Mangalore and of the fact that the present police arrangements are quite inadequate to meet this state of affairs. Mr. Lake proposed and Mr. St. C. Raymond seconded the following resolution which was carried, 'Resolved to ask the coffee curing and shipping agents at Mangalore and Tellicherry to set up a small committee to take up with the D. I. G. of Police arrangements for the prevention of robbery of goods consigned through cartmen to estates in planting districts.' Messrs. Lake and Raymond were elected as the representatives of the U. P. A. S. I. on the Committee.

Scientific Department and Coffee Experimental Station.—Mr. Krumbiegel, Ag. Director of Agriculture, gave a detailed account of what had been done at the Experimental Station. He explained also, as far as possible, the intentions of Government as regards the future working of the Station. Afterwards the Executive Committee's proposal, to allot a sum of Rs. 600 per mensem towards the pay of a Touring Officer to visit the coffee districts, was discussed. Those Associations in British India which are concerned in this matter were inclined to condemn the proposal. As a meeting with the Dewan had been arranged, Mr. Lake proposed and Mr. Tipping seconded, 'That no action be taken in the matter of scientific aid to coffee until the proposals of this Association, to have a fully qualified Resident Manager on the Station, have been put before the Mysore Durbar and its policy for the future management and working of the Mysore Coffee Experimental Station has been ascertained.' This was carried. After the interview with the Dewan the matter was discussed further. Mr. Tipping informed the Meeting as to what had taken place at the interview and emphasized the favourable attitude of the Dewan to the proposals put before him. Mr. Congreve proposed and Mr. Tipping seconded, 'That the Secretary be instructed to put before the Mysore Durbar the Association's views regarding the control and management of the Mysore Coffee Experimental Station and that until something definite has been arranged the services of Mr. Munro be retained and the Sidapur Station be maintained under his control.' This was carried.

Charmadi Ghaut Road.—The matter of the repair of this road has become a hardy annual at our District Association meetings and tends to become the same at the Upasi A. G. M. It has been raised more than once but so far without result. The question is of the greatest importance to us in Mysore and it is hoped that the resolution passed will have the desired effect. I proposed and Mr. Tipping seconded, 'This Association invites the attention of the District Board, South Kanara, to the very bad state of the Kodaikal Ghat Road, No. 4, commonly called the Boond Ghat Road, mile 15½ to the Mysore boundary, and request that immediate steps be taken to ensure that this road, which is the most important means of communication between Mysore and South Kanara, is put into "good" repair as soon as possible.' This was carried.

Stephanodores Hampel.—Owing to the ever present menace of the importation of this pest, Mr. Tipping proposed and Mr. Lake seconded, 'That this Association address the Government of India through the Government of Madras urging that import of Coffee except in the form of roasted and ground be prohibited with as little delay as possible.' Before this resolution was put to the vote, I asked in what way it would affect the Bababudin members of this Association who export from Marnagoa and import to Mangalore. I was assured that this point would not be lost sight of when representations are made to Government. The resolution was then passed.

Accounts.—Mr. Lake seconded a resolution, which was carried, 'That the Reserve Fund be increased by Rs. 20,000.'

Mr. Lake and I will be pleased to answer any questions.

In conclusion, I beg to thank you on behalf of Mr. Lake and myself for having done us the honour of electing us as your delegates.

(Sd.) C. LAKE.

„ M. A. DE WECK.

A vote of thanks, proposed by Mr. Reed and seconded by Mr. Denne, to Messrs. Lake and de Weck for representing the Association was passed. Before proceeding to the next item on the Agenda, the Chairman said that he proposed, as the matter was relevant to the Report just read, to take up the question of the Mysore Experimental Station. The Chairman explained what had happened at the Upasi Annual General Meeting and read extracts from a letter written by Dr. Coleman to Mr. E. W. Fowke. A general discussion ensued. Mr. English proposed and Mr. Oliver seconded, 'That this Association endorses the action taken by the U.P.A.S.I. in emphasizing that the Coffee Experimental Station be efficiently managed by the appointment of a fully qualified Resident Manager.'

Carried.

Coffee Cess

The Chairman read the two resolutions which he proposed to put from the Chair :—

(1) 'That the Government be asked to consider favourably the exemption from the Coffee Cess of all lands, situated in the extreme western portions of the Hassan and Kadur Districts which, owing to excessive rainfall, are quite unsuitable for coffee and on which no coffee is being or can be grown : and that application for such exemptions may be made to the Deputy Commissioners of the Hassan and Kadur Districts who shall be given powers to grant such exemptions in cases of genuine hardship.'

(2) 'That Government be asked to consider the levying of the Cess subject to a maximum of Rs. 50 from any one Estate.'

Before putting these resolutions to the vote, the Chairman spoke as follows :—'I should like to say a few words in explanation of these resolutions. In imposing this Cess on Coffee for the purpose of starting an Experimental Coffee Station in Mysore it undoubtedly appeared to Government that to levy the cess on all lands assessed as coffee lands whether planted or unplanted was the fairest way, and the method which would give the officials concerned in collecting it the least possible trouble.

'I am sure that it was never foreseen nor was it the intention of Government that the tracts of land, which are situated on the Western Ghats with a rainfall of 150 to 300 inches and more and which were assessed as coffee lands probably over 40 years ago in the days when the proper climate for growing coffee was not rightly understood, should fall within the scope of this Cess.

‘ Such lands are utterly unsuitable for coffee and are already overtaxed by reason of the inclemency of the South-West Monsoon and cannot be classed with Estates situated in more favourable zones. In some cases these tracts of land—they can hardly be called Estates—consist of thousands of acres of which only small portions are fit for growing Cardamoms and even these do not flourish or yield properly owing to excessive rains.

‘ They are, however, assessed as coffee lands although without a coffee tree on them, and are subject to the cess as at present imposed.

‘ This is so manifestly unjust that I feel sure we have only to bring the matter to the notice of Government to obtain, in such cases, exemption from payment of the Cess.

‘ With regard to the second resolution, it does not seem right that, when all the other Coffee Districts in South India are paying the two-anna cess on a voluntary basis on planted areas only, we in Mysore should be compelled to pay, in some cases, quite large sums of money on the unplanted areas and waste lands attached to our Estates.

‘ I know of one Estate in South Mysore which has to pay the cess on over 700 acres with a planted area of only 120, a large part of the balance of the land being scrub jungle unsuitable for coffee but assessed as coffee land.

‘ Many of us, both Indian and European planters, have considerable areas belonging to our Estates—land given for building sites and scrub jungle useless for planting—and it is to fix a maximum payable on such lands that this resolution aims at.

‘ I am well aware of the difficulties in the way of collecting the cess on planted areas only in Mysore. About $\frac{3}{4}$ of the acreage under Coffee does not belong to our Association, and it would be quite impossible for Government to arrive at anything like a correct acreage planted outside the Association.

‘ If the Government will agree to levy the cess subject to a maximum of Rs. 50 from any one estate the loss in revenue on this account will not be large ; as there are few estates in Mysore consisting of more than 400 acres.

‘ On the other hand the concession, though a small one, will be much appreciated by those of us who have large unplanted areas on which we at present have to pay.

‘ When I was recently in Bangalore for the Planters’ Conference it was my privilege to be one of a deputation which waited on the Dewan in connection with the proposals of the U.P.A.S.I. with regard to the Mysore Coffee Station.

‘ During the interview, at which the Revenue Commissioner was also present, I spoke to the Dewan about these two matters, and he was good enough to assure me that they would be considered by the Durbar if brought forward by our Association.

‘ Has any member anything to say on these resolutions ? ’

Mr. E. H. YOUNG :—

‘ MR. CHAIRMAN AND GENTLEMEN,

As we all know the Coffee Cess Bill was introduced into Mysore to raise funds for starting an Experimental Station at Balehonnur, and was warmly welcomed by the European Planters who gave Government their fullest support and are now willingly paying the two-anna cess on their coffee lands ; but unfortunately, at the time when we supported the scheme, we did not anticipate that land totally unfit for the growing of coffee would be cessed with the Coffee Cess as has been the case this year. To give you two instances of this, I will mention the Bargemuny and Byrapore Estates which are situated on the Western Ghats and have a yearly rainfall of over 250 inches. These two Estates have a total acreage of 2,363 acres and there is not and never will be a coffee tree in the whole of the land as you

will all readily understand that it is quite impossible to grow coffee in such a heavy rainfall; the only things possible to grow are Cardamoms and, perhaps, Tea. This being so, I ask you is it fair that these Estates should pay a two-anna cess towards experiments in an industry in which they are in no way concerned and by which they can in no way benefit?

'Some thirty or forty years ago these lands were wrongly classified as coffee land; it was at a time when not a great deal was thought about zones and any jungle land, irrespective of rainfall, etc., was considered good enough for coffee. Some years back Government realized that these lands were not fit to grow coffee, and reduced the taxes on them to eight annas per acre; so that by being cessed with the Coffee Cess they have had their taxes raised by 25 per cent which is more than the most flourishing coffee estate in Mysore, this, mind you, when they are going to get no benefit whatsoever from the experiments.

'I feel sure that we have only to approach Government in this matter to get it put right.'

A general discussion followed.

The resolutions were then put to the vote and carried.

Reports of Members on the Control Committees for the Mysore and Mangalore Divisions

MYSORE DIVISION

Mr. English read his report:—

MR. CHAIRMAN AND GENTLEMEN,

Mr. Oliver and I, as Active Member and Member-in-waiting respectively, attended the Mysore Division Labour Control Committee meeting in Bangalore on August 27, 1926. All Associations interested in this Division were represented, viz., Messrs. J. Aird (Nilgiri-Wynaad), J. B. Reid (Coorg), J. E. Bissett (Wynaad), Mr. Winterbotham (*Acting Director*), and Mr. A. Dunning (*Secretary*): Mr. A. E. C. Morris (*Visitor*) was present also.

1. Mr. Aird was voted to the Chair.

2. The Proceedings of the last meeting were read and confirmed.

3. *Mysore Bungalow Site*.—Mr. Dunning informed us that no offers for the site had been made. Recent information, that two firms intend opening show rooms or branches in Mysore, leads one to hope that this property may be disposed of. The Secretary was instructed to get in touch with these firms: this he has done.

4. *Propaganda Agent*.—Mr. Dunning expressed satisfaction with propaganda work carried out in this district and said that, as a direct result, recruiting had been stimulated in Hindupur. This was confirmed by Mr. Reid. It is interesting to note that the entry of Assam for the purpose of recruiting was apprehended in this area. It is my opinion, Gentlemen, that money spent on propaganda is money well spent.

5. It appears that Officials generally are somewhat antagonistic to the term 'Labour Agent.' A suggestion to change the name to 'Recruiting Officer' was made. Mr. Aird thought that the difference would not affect labour itself. On being asked for his opinion, Mr. Dunning said he had noticed that officials resented the present designation and thought 'Recruiting Officer' might be an improvement. I personally cannot see much advantage in this change.

6. *Letter No. MY/37 of August 12, 1926*—A letter from the Director referring to T.A. for an extra member in the absence of an active member attending. It was not clear whether any rule covered the case under discussion. The meeting was of the opinion that, as the member present had the same status and responsibilities as others present, he was entitled to the allowance.

In this respect one hopes that, when the Labour Department rules are published in a separate book as was recently decided, each case will be governed by its definite rule.

7. *Canarese Examination*.—Mr. Dunning was subjected to an examination in Canarese on August 26, 1926 and satisfied his examiners; who were Messrs. Tipping, Reid and Aird.

(a) Proposed by Mr. Reid and seconded by Mr. English that Mr. Dunning be congratulated on passing his test.

(b) The question of instituting language tests for all Superintendents was discussed. It was decided that this subject be brought up before the next Combined Control Committee meeting with the suggestion that a standard examination on the lines of provincial tests for the I.C.S. be instituted for all Superintendents taking over a Division and for Assistants joining the Department.

8. *Coorg Labour Act of 1926*.—This act and the working thereof was explained by Mr. Reid. Coorg appears to have a sound working Act, but, one understands, this Act is subject to advances being reduced and finally eliminated within a stated time.

9. *Inter District Labour Rules*.—These were discussed. Mr. Aird said that rules governing one District may not be suited to another, in fact may definitely go against the terms of agreement as between employer and his maistries. I would suggest that this Association co-operate with Coorg in the matter.

10. Mr. Reid asked if it were not possible for Districts to reduce advances. Mr. Aird said average advances in his District ran to about Rs. 20, but there were cases where a maistry advanced as much as Rs. 60 to 70. As this subject comes up on the Agenda of this meeting one will get the opinions of members here.

11. *Date of Next Meeting*.—Mysore, 8.30 a.m., December 6.

With regard to the general working of this Division, I would suggest that the Superintendent be requested to send in a monthly report, giving details of work regarding recruiting, warrant cases, ordinary defaulters, etc., which reports would be circulated to members and tend to keep them in touch with the Department.

I shall be pleased, Gentlemen, to put forward any instructions you may give me at this meeting.

With reference to the question of instituting language texts for all Superintendents, the Chairman informed the Meeting that this had been settled at the U.P.A.S.I. Annual General Meeting.

The Secretary was instructed to write to the Superintendent with reference to his issuing monthly reports to members interested in the Mysore Division.

Mr. Dennis proposed and Mr. Denne seconded a vote of thanks to Messrs. English and Oliver.

Carried.

MANGALORE DIVISION

Mr. Reid said that he had no report to make. The work of the Mangalore Division, he added, was going on very smoothly and satisfactorily. It had been decided to make a start with the registration of coolies. There was no further progress to report as regards Co-operative Societies.

Mr. Whitton proposed and Mr. Young seconded a vote of thanks to Mr. Reid.

Carried.

Mr. English was asked to bring up at the next Control Committee meeting the question of registration of coolies in the Mysore Division.

Reduction of Advances to Labour.—The Secretary read the resolution as passed at the U.P.A.S.I. Annual General Meeting. It was decided that no decision could be arrived at this meeting.

Mr. English proposed and Mr. Oliver seconded, 'That a committee of three members be elected to go into the matter of reduction of advances and to get into touch with other Associations.'

Carried.

Proposed from the Chair, 'That Messrs. Reid, Oliver and English be elected as members of the committee.'

Carried.

Wages to Coolies.—Mr. Hunt asked if he would be in order to bring up the matter of maximum wages to coolies. The Chairman, with the consent of the meeting, proposed from the Chair:—

'That a Committee, composed of Messrs. Hunt, Whitton and Dennis consider this question and submit a report at the next meeting.'

Carried.

Revision of Existing Game Laws

The Secretary read a letter from the Conservator of Forests in Mysore. Proposed from the Chair, 'That Messrs. English, Watson and Denne be asked to collaborate and submit a reply.'

Carried.

Election of New Member

(Postponed from earlier in the meeting). The Secretary explained the result of his talk with Mr. Sheshaiya regarding the election of Mr. S. L. Mathias. It was resolved that Mr. Sheshaiya be asked to communicate to Mr. Mathias the opinion of the Association, and that the matter come up for final disposal at the next meeting.

Extra Subjects

With the consent of the meeting, Mr. English spoke shortly on the following subjects:—

(A) THE UPASI SPORTS CLUB

Mr. English said that he had attended two meetings in Bangalore. It was possible that in 1928 the venue of the Sports meeting may be Bangalore. He knew that not much interest was taken in the Club at present as most people were unable to attend the meetings at Ootacamund. He hoped, however, that, if it was decided that the Meeting should be held in Bangalore, everybody would support it and take an active part in the meeting.

(B) I. A. R. O.

Mr. English said that he regretted Major Hamilton had been unable to stay and address the meeting. Major Hamilton had come to Chikmagalur on Tuesday, but could not prolong his stay until Thursday. He explained the position as regards men joining under this scheme and added that he hoped that the senior men would encourage the young men to join.

Next Meeting

It was decided to hold the next meeting at 11 a.m. on December 16.

With a vote of thanks to the Chair, the meeting ended.

M. A. DE WECK,
Secretary.

C. LAKE,
Chairman.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market				Average prices obtained for tea							
Mark		Pkgs.	Price		District	Week ending Sept. 25, 1926		January 1 to Sept. 25, 1926		January 1 to Sept. 25, 1925	
(A) TEA (WEEK ENDING SEPTEMBER 25, 1926)					N. India.	s.	d.	s.	d.	s.	d.
					S. India	**1	4.41	††1	7.80	††1	5.34
					Ceylon...	1	7.13	1	8.47	1	7.48
(a) <i>Anamallais</i> —					Java ...	1	2.45	1	4.36	1	0.66
Thayamudi	...	123	1	5½	Sumatra.	1	6.30	1	5.34	1	4.22
Nullamudi	...	178	1	5¼	Nyassa-		Nil.	1	5.63	1	1.05
Mukkottumudi	...	279	1	5	land.						
Thonimudi	...	318	1	4¾	Total ...	*1	6.87	†1	7.88	†1	5.42
Kallyar	...	263	1	4½							
Sholayar	...	165	1	4½							
Pachamalai	...	93	1	4¼							
Selaliparai	...	123	1	4							
(b) <i>Central Travancore</i>					(B) COFFEE						
Caradi Goody	...	20	1	6	SPECIAL CABLE, LONDON, OCTOBER 20, 1926 'A' QUALITY 160s. MARKET NOMINAL						
Stagbrook	...	133	1	4¾							
Glenmary	...	102	1	4¾							
Haileyburia	...	97	1	4½							
Thungamullay	...	100	1	4¼							
Fairfield	...	33	1	4¼							
Kuduakarnam	...	150	1	4							
Dymock	...	81	1	4							
Mlamalla	...	73	1	4							
(c) <i>Kanan Devans</i>—												(C) RUBBER
Sevenmallay	...	185	1	5¼	The London 'Spot' quotation for Plantation first Latex Crepe on Tues- day, October 19, 1926, was 20¾d.						
Kalaar	...	255	1	5							
Perriavurrai	...	163	1	4¾							
Munnar	...	84	1	4½							
(d) <i>Mundakayam</i> —											
Yendayar	...	74	1	3½							
(e) <i>Nilgiris</i> —											
Prospect	...	179	1	8½							
Terrainia	...	47	1	7½							
Coolacumbie	...	82	1	5¼							
(f) <i>Nilgiri-Wynaad</i> —											
Seaforth	...	84	1	4½							
(g) <i>South Travancore</i> —											
Braemore	...	101	1	4½							
Hereford	...	117	1	3¼							
Merchiston	...	119	1	2¾							

** Based on 4,932 packages.

†† „ „ 131,734 „

†† „ „ 137,634 „

* Based on 88,128 packages.

† „ „ 2,413,615 „

† „ „ 2,271,031 „

(b) *Précis of Reports on the London Market Received on Monday, October 18, and covering the seven days ending Tuesday, September 28:—*

1. *Tea*.—While tippy teas were dearer during the seven days under review than in the previous week, and mediums were fairly firm; there was less demand for the commoner sorts which registered a decline of $\frac{1}{4}d.$ to $\frac{1}{2}d.$ per pound, and, as a result, the South Indian average fell by $\cdot96d.$

2. *Rubber*.—Stocks again increased by 1,337 tons to 34,586 tons, but the 'spot' price was a little stronger at from $21d.$ to $21\frac{1}{2}d.$ It is generally believed on the London Market that Government, when making their announcement with regard to exports under the Restriction Scheme for the ensuing November–January quarter, will indicate what policy it intends to adopt with regard to the unused coupons for some 41,000 tons which are now being held in Malaya and Ceylon.

3. *Coffee*.—No East Indians were on offer at the public auctions during the seven days under review. On September 28, the London stocks in bags of African, Indian, and other kinds respectively amounted to 21,069, 10,431 and 73,720; as against 30,741, 33,264 and 107,196 on the corresponding date last year.

4. *Pepper*.—The market was quietly steady; but increased activity at an early date is foreshadowed, since shipments from the far East are not going Westward, and stocks in market are reported to be very low.

II. Weekly Rainfall Statement

From Sunday, October 10, 1926 to Saturday, October 16, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	0·66	63·86	64·52	19. Naduvattam	1·21	90·23	91·44
2. Kalthuritty.	4·28	98·38	102·66	20. Coonoor ...	N.R.	19·72	N.R.
3. Tenmalai ...	1·64	99·19	100·83	21. Kotagiri ...	6·47	31·70	38·17
4. Mundakayam.	10·85	131·82	142·67	22. Ootacamund	2·32	35·61	37·93
5. Peermade ...	7·08	164·26	171·34	23. Yercaud ...	3·54	36·20	39·74
6. Twyford ...	9·09	181·37	190·46	24. Devala ...	4·50	138·59	143·09
7. V'periyar ...	2·03	73·73	75·76	25. Gudalur ...	2·27	N.R.	N.R.
8. Kalaar ...	3·33	185·95	189·28	26. CALICUT ...	2·39	116·26	118·65
9. Chittuvurrai	2·65	31·78	34·43	27. Kuttiyadi ...	N.R.	N.R.	N.R.
10. BODI'KANUR	1·56	8·64	10·20	28. Vayittiri ...	2·48	177·05	179·53
11. COCHIN	3·55	106·55	110·10	29. Manantoddi.	1·98	99·48	101·46
12. Mooply Valley.	2·80	123·38	126·18	30. Billigiris ...	3·45	41·93	45·38
13. Pachaimalai.	3·45	112·55	116·00	31. Sidapur ...	4·87	68·04	72·91
14. Mudis ...	4·02	217·90	221·92	32. Pollibetta ...	2·30	92·05	94·35
15. Nell'pathy...	1·16	86·11	87·27	33. Somwarpett.	2·59	66·66	69·25
16. POLLACHIE.	1·35	20·55	21·90	34. Ballupete ...	N.R.	62·59	N.R.
17. Manjeri ...	4·13	121·27	125·40	35. MANGALORE	8 17	104·60	112·77
18. Nilambur ...	2·55	111·23	113·78	36. MADRAS ...	2·92	10·54	13·46

W=During the week,

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(*continued*).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod and Co. :—

III. The Madras Market Report

(*For the week ending Thursday, October 21, 1926*)

(A) EXCHANGE

The steadier market reported at the close of our last report of Thursday, 14th instant, has been well maintained throughout this week ; though there has not been much business doing except for a number of bills which were fixed immediately after the reaction set in at rates which have not since been available. It now appears improbable that Government will be forced to sell Reverse Councils at 1s. 5 $\frac{3}{4}$ d. The Puja holidays have now practically ended, and all markets will be open next week ; and it remains to be seen if bills come out in Calcutta. Early on Wednesday, 20th instant, rates for Near positions were a little easier ; but the undertone for Forward positions was decidedly steady. To-day Thursday the undertone has remained steady with all Banks good sellers Ready at 1s. 5 $\frac{7}{8}$ d. Bombay opening advices came in a shade easier with rumours of expected Bullion. Rates have risen 1/32 all round during the week. We quote T.T. 1s. 5 $\frac{7}{8}$ d. October, 1s. 5 29/32d. first and 1s. 5 15/16d. second half November, 1s. 5 31/32d. first and 1s. 6d. second half December, 1s. 6 1/32d. January/March, 1s. 6d. April, 1s. 5 31/32d. May, 1s. 5 15/16d. June/September. Banks buying three months D/A bills 1s. 6 7/32d. October, and possibly 1s. 6 3/16d. offering for the mail, 1s. 6 $\frac{1}{4}$ d. first and 1s. 6 9/32d. second half November, 1s. 6 5/16d. first and 1s. 6 11/32d. second half December, 1s. 6 $\frac{3}{8}$ d. January/March, and 1s. 6 11/32d. April. During the week Bills have been placed at 1s. 6 3/16d. for half November, and for other positions at 1s. 32d. better than those quoted.

(B) MONEY

There is little change. We quote Call at 1 per cent, three months at 2 per cent, and four to six months at 3 per cent. The Imperial Bank rate is unchanged at 4 per cent and the percentage of cash to liabilities is now 43.75 against 48.04 a week ago. Government have deflated Currency by 5 Crores. In the Foreign Exchange Market the Franc has improved in London to 161 against 170.25 last week, and the London/New York Cross Rate now stands at 4.84 13/16 as against 4.85 $\frac{1}{2}$ d. a week ago. This is probably due to the prolonged Coal Strike and consequent trade returns. The fall in the price of Silver has continued, standing in London on 13th instant, at 25s. 15/16d. and in London on the 20th instant, at 24 $\frac{1}{2}$.

For the week ending Wednesday, October 20, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10	10½
Bank of Mysore Rs. 100	160	...
Indian Banks (Rs. 100) Rs. 50	66	69
Indian Banks (Rs. 100) Rs. 10	13	13½
Central Bank (Rs. 50) Rs. 25	28	29
Imperial Bank of India (Rs. 500)	1430	1445
" " (Rs. 125)	360	365
Chartered Bank (£5)	£ 19-10-0	£ 20-10-0
Eastern Bank (£10) £5.	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 29-5-0	£ 30-5-0
" " (£25-B) £12½	£ 29-5-0	£ 30-5-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 46-10-0	£ 48
P. and O. Bank (£10)	£ 10-2-6	£ 10-12-6
MILLS		
Bangalore W. C. and S. Ordry. (Rs. 100)	195	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	92	...
Buckingham and Carnatic Ordry. Rs. 100	200	205
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	122	123½
Coimbatore Rs. 100	164 x.D.	...
Coimbatore Mills Rs. 85	80	86
Gokaks Rs. 100	110	115
Maduras Rs. 100	405	...
INDUSTRIALS		
Deccan Sugar Ordry. Rs. 500.	860	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100	...	105
E. I. Distilleries and Sugar Factories Ordry. (£0-16-0)	15s.	17s.
E.I.D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	65	70
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	4	4½
Singareni Collieries, Rs. 10	10	10½
W. E. Smith Ordry. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	...
Spencers Ordry. Rs. 100	155	160
Spencers 6 per cent. Prefs. Rs. 100	96½	...
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	...
Tata Iron and Steel Ordry. (Rs. 75)	55	58
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	73	76
United Breweries Ordry. Rs. 75	135	...
United Breweries 6 per cent. Prefs. Rs. 100	90 x.D.	...
PLANTING		
Cochins Rs. 15	53	57½
Eddivannas Rs. 15	30	31
Kalajas (Rs. 15) Rs. 7	6½	7½
Kinalurs Rs. 10	...	35
Kuttiadis Rs. 15	...	...
Malankaras Rs. 30	110	115
Peermades Ordry. Rs. 10	27	29
Peria Karamalais Rs. 15	48	50
Periasholas Rs. 10	7	7½
Periyars Rs. 10	22½	24
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	3½	4½
Thodapuzhas Rs. 10	32	32½
Thirumbadis Rs. 10	21	22
Tropical Plantations Rs. 22½	22½ c.D.	...
United Nilgiris Rs. 100	115	...
Vellamalais (Rs. 15) Rs. 13	16 c.R.	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 44] SAT., OCTOBER 30, 1926 [PRICE, AN. 2

CONTENTS

	PAGE		PAGE
An Open Letter to Capt. Windle, late M.L.C.	... 731	Letters to the Editor— A. Gray Week Album	... 733
Editorial Notes	... 732	B. Coffee Fertilizers	... 734
Pervocalla	... 733	Tea Manufacture	... 735
		Commercial and Meteorological	743

AN OPEN LETTER

FROM

THE CHAIRMAN OF THE UNITED PLANTERS'
ASSOCIATION OF SOUTHERN INDIA

TO

CAPT. E. G. WINDLE,
LATE PLANTING MEMBER, M.L.C.

THE PLANTING SEAT

My dear Capt. Windle,

I see that you have withdrawn your nomination to the Madras Legislative Council, and that Mr. Congreve has been elected un-opposed.

I should like to take this opportunity of thanking you on behalf of the United Planters' Association of Southern India for all you have done during your term of office both as Planting Member and as a member of the Executive Committee.

I fully realize the vast amount of work and sacrifice that such honorary positions entail; and I would like to express my great appreciation of the unfailing courtesy and assistance you have accorded me during the period I have had the pleasure of working with you.

Yours sincerely,
R. FOWKE,
Chairman, U.P.A.S.I.

EDITORIAL NOTES

*The Rubber
Restriction
Scheme*

At the end of last week the Colonial Office published the regulations which, it had decided, should govern the quantities of rubber exportable at the minimum rate of duty from Malaya and from Ceylon during the twelve months commencing on November 1, 1926. They will be subject to revision after the lapse of this period if it is then decided that the Restriction Scheme should continue in force.

The percentage of Standard Production exportable under the new regulations at the minimum rate of duty may fluctuate between 60 and 100. The lower limit will be adopted in any quarter following a quarter when the average price of rubber in London was below 15*d.* per pound, and the higher limit will take effect in any quarter succeeding a quarter when the average price was over 3*s.* per pound.

If the average price for any quarter is under 21*d.* but not less than 15*d.*, the percentage for the succeeding quarter will be reduced by 10 ; or by 20, if the deduction has to be made from the figure of 100 per cent.

When the average price for any quarter has been 2*s.* per pound or more, the percentage for the next quarter shall be increased by 10 ; or by 20, if the increase has to be made on the figure of 80 per cent.

If the average price for any quarter is less than 2*s.* but not lower than 21*d.*, the percentage for the ensuing quarter shall be unchanged ; but, if the average price remains for three consecutive quarters at 21*d.* or above, the percentage for the next quarter shall be increased by 10.

Colonel Amery stated in the House on Wednesday last that a decision, as to what, if any action was necessary with regard to unused Malayan and Ceylon coupons, would be shortly made.

We understand that the Madras Government has decided, subject to the sanction of the Government of India, to repeal THE
Act I of 1903 MADRAS PLANTERS LABOUR ACT I of 1903.

A plausible Englishman of good presence, who, we understand, has
A Warning been for some time taking a free trip throughout the Planting Districts at the Planters' expense, recently proceeded from the Anamalais, which he had covered pretty thoroughly in the afore-said manner, to the Nilgiris where he induced a Planter to pay his railfare to Madras and give him a letter to the Secretary of the U.P.A.S.I. promising a contribution towards the cost of a passage to England if the Ex-Services Association could be induced to take the matter up. He left the Secretary's Office stating that he would seek employment in Madras ; but ten days later he was reported to be sojourning at Chikmagalur !! We have pleasure in adopting the suggestion made to the Secretary of the U.P.A.S.I., by some of the Planters who have helped the man, that the columns of *The Planters' Chronicle* should be used to put others on their guard. The Police, we know, strongly deprecate indiscriminate help being afforded to such persons ; many of whom they know have regular beats, and—wishing for nothing better than to be allowed to continue to lead the aimless life they do—are careful to avoid trouble just sufficiently to keep themselves out of the Courts. If everyone would resolutely refuse to help such gentry in any shape or form, they would be compelled to go to the Police, who have powers to treat them as destitute European vagrants and to get them if deserving a free passage Home.

PERSONALIA

DEATH

GRIFFITH.—On October 19, at Bradworthy, North Devon; Mrs. H. L. Griffith of 'Corsley', Kotagiri.

ON THE SICK LIST

We are delighted to report that MRS. WADDINGTON continues to make excellent progress after her operation, and is now able to see Callers at the Lady Ampthill Nursing Home.

We are pleased to hear too that MRS. C. GOLDIE TAUBMAN is also making rapid progress towards recovery after an operation at the same Home.

ARRIVALS

Amongst the arrivals at Madras last Monday by the *S. S. Mercara* were MR. and MRS. J. C. BLACKHAM of Attikunna Estate, Mango Range, and two children; MRS. P. G. TIPPING and two children; MR. W. V. REILLY, Group Manager of the English and Scottish Joint Co-operative Wholesale Society's Estates at Hardypet; and MESSRS. MCCALLAM, RUSSELL and ENGLISH who have secured appointments under that Society. MR. MCCALLAM has been posted to the Manantoddy Group; and MESSRS. RUSSELL and ENGLISH to the Mango Range Group of Estates.

MR. J. H. COX has obtained a post under the Kerala Calicut Estates, Limited, and taken up duties as an Assistant on Calicut Estate.

MR. W. G. THOM has taken charge of the Kerala Tea Estate Co.'s Estate.

DEPARTURE

MR. W. R. GROVE of Attikunna Estate left Colombo for Home on the 24th.

OTHER PLANTING NEWS

The *Fort St. George Gazette* of October 19, 1926, announces that the Governor-in-Council has been pleased to appoint MR. JOHN ERNEST SAMPSON and MR. WILLIAM HERBERT MARTIN, Chairman and Honorary Secretary respectively of the Anamalai Planters' Association to be Justices of the Peace within and for the 'Anamalai Hills'.

LETTERS TO THE EDITOR

(*The Planters' Chronicle* is not responsible for its Correspondents' views.)

A. Ooty Week Album

THE EDITOR, THE 'PLANTERS' CHRONICLE', MADRAS.

SIR,

In reply to 'S. G.'s' letter in your this week's issue, I regret that there has again been a great deal of delay in getting the Album circulated round districts. 'S. G.' will be glad to hear that it has not been lost this year yet, as was the case in 1925; and, if he will let me know his district, I will see that he gets it before the next Meet if possible.

The 1925 album was traced to Manantoddy, and it is presumed was packed by mistake in the boxes of a member who was suddenly recalled to England.

This year the album has done the round of five districts, and was sent to the Anamalais in September. It goes next to the Kanan Devans and then to Mysore.

District Representatives of the Club are responsible for its circulation, but I regret that in some cases it has been allowed to get hung up.

I understand that Willie Burke is quite satisfied with his 1926 orders.

Yours, etc.,

J. W. FULCHER,

Honorary Secretary, U. P. A. S. C.

DEVARASHOLA, October 18, 1926.

B. Coffee Fertilizers

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

Please permit me to say a few words on 'Coffee Fertilizers' in reply to the letter of Mr. P. M. Wilkins, published on page 717 of the *Planters' Chronicle* of October 23, 1926.

I do not know on what data the percentages of plant foods that should be present in a general fertilizer as mentioned in the letter are based. So far as the experience of other countries, notably that of Brazil goes, a ratio of 2 : 3 : 4 with regard to nitrogen, phosphoric acid and potash is advocated. Based on this, a mixture which contains 5 per cent nitrogen ought to contain $7\frac{1}{2}$ per cent phosphoric acid and 10 per cent potash. It is this ratio of 2 : 3 : 4 that has been taken by me as the basis for work on the Balehonnur Coffee Experimental Station, and suitable modifications will be introduced in due course to find out if the ratio requires any alteration at all.

The efficacy of a manure depends not only on the percentages of nitrogen, phosphoric acid and potash, but also on the form in which they are present in a mixture. Moreover, according to the experience of the Agricultural Chemists in Germany, there are certain conditions affecting the utilization of nitrogenous and phosphatic manures when they are applied together. Only 60 per cent of the nitrogen applied and 10 per cent of the soluble phosphoric acid seem to be used up by a crop. Hence it is clear that due allowance must be made for this fact when applying manures for any crop, and larger quantities of plant foods must be applied as manure than what are removed by a crop.

So far as coffee is concerned, according to experience in Brazil, about 50 lbs. of nitrogen, 75 lbs. of phosphoric acid and 100 lbs. of potash per acre seem to be necessary. This works out to a mixture consisting of

625 lbs. Ground-nut cake,
175 lbs. Concentrated Superphosphate and
200 lbs. Sulphate of Potash,

or 1,000 lbs. per acre of the mixture, or slightly over 12 ozs. per plant on estates containing 1,200 plants per acre. It remains to be seen whether it pays to apply so much manure per acre in this country and that is also being tested on the Coffee Station.

In my recent tour through parts of the Coffee Districts of Mysore in May last, some planters told me that they do apply as much as 12 ozs. of manure per plant and that small doses of 4 to 6 ozs. constitute a mere waste of money.

It is not my purpose to write a note on 'Coffee Manuring' just at present. I shall certainly do so later on when I have collected data from manurial experiments on the Coffee Station as well as on private lands. I should like to mention for the information of your readers that manure mixtures containing the plant foods in question in the ratio of 2 : 3 : 4 are now being tried on about 2,000 acres by planters in Coorg as well as in Mysore.

Chemical analysis done by myself and my colleagues in this laboratory during the time of Dr. Lehmann between the years 1905-7 and published by him on page 48 of his Annual Report for 1907-8, shows that the average composition of the coffee bean of Mysore and Coorg is as follows :—

Nitrogen	...	2.30%
Phosphoric Acid	...	0.40%
Potash	...	2.00%

I have heard from planters, European as well as Indian, that a bumper crop of coffee may yield up to 1,200 lbs. of coffee per acre. In such a case, the amount of plant foods per acre removed by the marketable product alone work out to

Nitrogen	...	27 lbs.
Phosphoric Acid	...	5 lbs.
Potash	...	24 lbs.

Since only about 60 per cent of nitrogen and 10 per cent of phosphoric acid supplied in manure become useful to plants as mentioned in my previous letter, to make good for the loss as detailed above, we have to supply

Nitrogen	...	45 lbs.
Phosphoric Acid	...	50 lbs.

in the form of soluble manure.

To this has to be added what is lost in the pulp and what is utilized by shade trees. I have neglected the plant foods used up by weeds, for they are put back into the soil when the weeds are pulled out and allowed to decay on the spot. Only part of the plant foods taken up by shade trees is returned to the soil in the form of leaves that drop down to decay.

So, we may be erring on the safe side when we supply in the manures added

Nitrogen	...	50 lbs.
Phosphoric Acid	...	75 lbs. per acre.

Since about 50 per cent of the potash supplied is assimilated by plants, a supply of 100 lbs. per acre seems to be a most liberal allowance. It is thus seen that the practice of Brazil in supplying 50 lbs. nitrogen, 75 lbs. phosphoric acid and 100 lbs. potash per acre is not at all un-sound even with regard to the ratio of plant foods which a standard manure mixture for coffee ought to contain.

It may be contended as to why manures should be applied based on the requirements of a bumper crop of 1 lb. of coffee beans per acre. In a rational system of manuring, it is always safest to provide for the requirements of the maximum crop. It is only when such an application is found to be unprofitable, that we are justified in reducing the dose of manure to the most profitable limit.

In this connection, it may not be out of place to mention that it is not desirable to provide all the necessary plant foods in the form of salts. To counteract the bad effect of certain salts on the mechanical condition of the soil, some organic manures such as oil-cakes, are necessary. Besides, to renovate the micro-organisms of the soil, an occasional application of farm-yard manure, such as sheep manure may also be necessary and prove beneficial. It has been the experience of German Agricultural Chemists that maximum yields in vineyards are to be got by the application of artificial manures in conjunction with farm-yard manure. After all, artificial manures are meant to supplement farm-yard manure and not to supplant it.

In conclusion, permit me to add that it is not my intention to teach the planters all about manuring. They do certainly know a good lot from a practical stand-point of view and I should like to get the benefit of their experience to guide me in my work.

Yours, etc.,

B. N. IYENGAR, B.A., Ph.D.,
Agricultural Chemist in Mysore.

T E A

IMPORTANT POINTS IN MANUFACTURE

BY

P. H. CARPENTER, F.I.C., F.C.S.,

Chief Scientific Officer

AND

C. R. HARLER, B. Sc., F.I.C.,

Chemist, Indian Tea Association.

Although it is realized that definite facts rather than general theories regarding tea manufacture are required, yet, since the leaf produced from no two areas is the same and conditions are different in every factory, it is impossible to lay down any hard and fast rules for the manufacture of tea. All that can be said is that under certain conditions, such and such a treatment will tend to accentuate this or that quality of a tea. There can be no standard process in tea making for conditions are always changing and each operation must be conducted with a view to making the best of existing conditions. Apart from this it is realized that the blending scheme at Home requires several definite kinds of tea and it seldom pays to alter the type of tea for which a garden has a name although it undoubtedly pays to improve the type.

Good Leaf.—The growing and plucking of the leaf is outside the scope of this paper but some indication as to what constitutes good leaf may be given. The best leaf is obtained from bushes having a long growth of old wood and a short growth of new wood, and the cutting down of a garden generally brings about a falling off in quality over the next few years. The best tea comes from old, unpruned bushes; and the poorest tea is from collar-pruned bushes. Darjeeling, a quality area, has large percentages of unpruned tea.

Plucking also influences quality for the closer the plucking the better the leaf. Many gardens in Assam pluck to the *janum* or 'fish leaf' from the beginning of the season; whilst in the Dooars and the Surma Valley longer plucking is employed in the early part of the season largely on account of climatic conditions. On the other hand, the stem near the *janum* is less succulent than that above a leaf, and close plucking is liable to produce more stalky teas than is long plucking.

Both excessive shade and excessive sun can lower the quality of the leaf.

That good quality is made in the garden has become an axiom in the tea districts; for in addition to the question of pruning, plucking and shade, factors within our control, there are other factors like the type of soil, *jat* of bush and climate, over which we can exercise little control, all influencing the leaf. It is recognized that gardens in some districts can more easily produce certain types of teas than gardens in other districts, e.g., the Dooars can produce thickness of liquor, and Assam can produce pungency, but the importance that needs to be acknowledged is that good leaf brought in from the garden is often spoilt owing to unsatisfactory conditions in the factory. It is noticeable that factories where good tea is made are invariably those in which great care is taken and attention paid to detail.

Red Leaf.—After the leaf is plucked it often necessarily remains in the basket for several hours before it reaches the leaf-house. It is known that the leaf in a tightly packed basket gets hot, and temperatures as high as

140°F. have been recorded in the centre of leaf baskets. This heating accelerates the withering process so that the leaf turns red. Whilst this in itself is not necessarily deleterious in that good tea can be made from red leaf, yet it is impossible to make good tea from a mixture of red leaf and fresh leaf, for the two represent different stages in the withering process. Red leaf can only be avoided by keeping the leaf cool, and this is done by allowing plenty of air to get to the leaf. Although it is customary to bring in the leaf twice a day for withering, it is much better to send it in oftener if possible; and a continuous supply of leaf throughout the day should be aimed at.

The leaf does not get hot on the top and at the sides of the basket, although these positions are exposed to the heat of the sun. In fact leaf in the sun only gets slightly warm owing to the cooling effect of evaporation. The loss of moisture from the leaf in the basket constitutes the beginning of the wither, but with red leaf the process is carried much further without the loss of water. The chemical wither is well advanced in red leaf and often such leaf should be manufactured when it reaches the factory, for the full chemical wither is realized although the leaf is not physically ready. Red leaf should be separated from the fresh leaf as soon as it comes in from the garden.

It is of interest to observe that leaf tightly packed to the exclusion of air does not get hot. Such tight packing is impracticable, and efforts must be employed in the direction of loose packing in order to keep the leaf cool.

THE WITHERING PROCESS

The withering process is the most important in tea manufacture because no manipulation of the other process in manufacture can make up for a poor wither.

The change taking place in the leaf as it withers is a complicated one, partly physical, partly chemical. The physical wither consists in the development of a flaccid or flabby state in the leaf owing to the collapse of the leaf cells, and the chemical wither denotes certain changes in the constituents of the cell sap. Both processes may go on separately, but in practice they go together.

It is sometimes thought that the main part of the withering is the obtaining of the leaf in a state fit for rolling. If this were all that were necessary withering could easily be carried on by passing leaf through some form of dryer. The process however is a chemical one and the physical change in the leaf is not an essential one to the making of black tea.

The original tea makers, the Chinese, rolled the leaf and twisted it and custom now demands a tea with a twist. But good black tea may be made from leaf which is still turgid and physically fresh.

The Chemical Wither.—Certain chemical changes must take place within the tea leaf in order that it may be made into black tea, and the rapidity with which these changes take place depends on the vitality of the leaf. As the vitality is lowered the processes are accelerated. The vitality may be reduced in several ways. The leaf may be poisoned, it may be heated or it may be partially dried, and all three treatments lower the vitality and hasten the chemical changes in the leaf.

Thus if leaf is placed in chloroform vapour it is poisoned, and in ninety minutes the fresh green leaf has turned copper coloured although physically it is still fresh. This method is not practicable in the factory.

If the leaf is heated the chemical wither takes place rapidly in relation to the rise in temperature, provided that the latter does not rise above 155°F.

at which temperature the enzymes are destroyed. In this case the leaf will not ferment and green tea results. Leaf has been heated in a saturated atmosphere so that no drying takes place yet, if the temperature be high enough, and below that mentioned above, the leaf takes on the colour associated with the withered state in a short time. As the temperature becomes lower, heat, unaided by drying takes longer to bring about the chemical wither, and we know that at about 85°F., the average Monsoon temperature, the leaf will not wither even in two or three days. This is a common experience in the rains when the atmosphere is saturated and no physical wither is possible. In lofts the wither is hastened by raising the temperature.

The usual means employed to lower the vitality of the leaf is to slightly dry it. When the leaf has become flaccid as the result of the collapse of the cells, then further drying is unnecessary; and a certain time must be allowed to elapse for the chemical wither to take place, the time being dependent upon temperature and the amount of drying. The lower the temperature the longer will be the time required.

It is difficult to tell when the leaf is chemically ready, but a rough guide is given by the subsidiary veins of the leaf which turn from a bright green to a reddish brown when the leaf is ready. When this is noticed on the first leaf, the bud has usually gone past this stage and practically the whole of it is reddish brown, whilst the second leaf will scarcely have changed at all. With coarser plucking the divergence between the chemical state of the various leaves is still greater. Herein lies one of the main difficulties in manufacturing good tea from coarse leaf.

The same amount of drying does not always produce the same results unless the time is altered to suit other conditions. Thus to-day the average temperature may be 85°F. whilst to-morrow it may be ten degrees lower. Although on the cool day the leaf may possibly dry as quickly as on the warmer day, yet the chemical wither will be more quickly realized at the higher temperature.

An important point to be noticed is that after the drying has produced a flabby leaf, further drying may retard the chemical withering. In open leaf houses conditions are often particularly difficult. When monsoon conditions do not prevail, then the leaf sometimes dries without withering. During Monsoon conditions it often happens that the leaf has not dried sufficiently, and the chemical wither has not proceeded far enough before the leaf has to be manufactured in order to make room for the incoming leaf. If using lofts care must be taken to stop the forced draught as soon as the leaf has sufficiently dried.

The Physical Wither.— It is of the utmost importance that the leaf shall dry evenly. The evenness of the wither depends on the kind of spreading which should be thin. Comparatively few factories have sufficient rack area to allow for ideal spreading so that one leaf shall not overlap another. This disadvantage is most noticeable in factories using fan lofts.

The best could be made of existing conditions by turning the leaf over on the racks till the drying has proceeded far enough. When this stage is reached the leaf may be collected together to minimize any further loss of water but an uneven rise of temperature must be guarded against. This treatment of the leaf is however practically impossible.

On the racks one pound of leaf should occupy about a square yard, more when it is wet and the atmosphere damp, less when the atmosphere is dry. With wire racks the spreading may be somewhat thicker than hessian. This spreading is not ideal but it is thinner than that usually employed.

It is easy to tell when the leaf is physically ready, for when 4 lb. leaf dry to 3 lb. then the drying has gone far enough for rolling. Fresh leaf contains about 75 per cent moisture; so that the leaf, in the state of dryness referred to, contains about 66 per cent. moisture.

Leaf is physically fit for rolling when it has become flaccid. Too quick drying, which may lower the moisture content of the leaf to 65 per cent, does not necessarily make it fit for rolling, because the chemical reactions may not have been realized. On the other hand, 'red leaf' still containing a high percentage of moisture is often more flaccid than the leaf on top of the basket which has dried quickly in the sun.

Well withered leaf produces a black, well-twisted tea with a mature liquor whereas under-withered leaf gives a brownish flaky tea with a raw or bitter liquor. A strong broken tea such as is now demanded by the market requires a full chemical wither and a mechanical or physical wither on the light side. To produce teas such as this requires very careful control of the withering, for it means that leaf must not be allowed to dry too far yet sufficient time must be given for the chemical wither to materialize. The chemical wither can of course take place without any drying but the time required is very long at ordinary temperatures.

Thus it is clear that any definite statement regarding the time leaf should be left on the racks is wholly futile, for the time must depend entirely on the atmospheric humidity or drying capacity of the air, and the temperature. This indicates how difficult it is to control the wither in open leaf houses.

The Drying Capacity of Air.—When using withering lofts there are one or two points needing careful consideration. Warm air not fully saturated with moisture is blown into the loft and then drawn across the leaf by fans at either or both ends of the loft. As this warm air passes over the leaf it picks up moisture and in time becomes saturated. It is obvious that as soon as this happens it ceases to be of use as a drying agent.

In order to avoid this, the air may be drawn through the loft more quickly; but then there is a danger that the leaf on the racks near the air inlet will be over-dried. For controlling the air supply different parts of the loft must be fed with dry air as, for instance, by means of air ducts, and the state of the air should be examined by means of the wet and dry bulb thermometers.

A few remarks may be written here about the drying capacity of hot air. It often happens that, on a wet day, saturated air goes into the tubes of the dryer; but when the temperature is raised from say 85° F.—the average ordinary air temperature—to 180° F. or 200° F. although the moisture content or *absolute* humidity of the air remains the same, the *relative* humidity is lowered and the drying capacity is greatly enhanced. Again when the air leaves the dryer at 120° F., although then it not only contains its original moisture but also that picked up from the leaf during drying, it still has, by virtue of its temperature, a lower relative humidity, i.e., a greater drying capacity, than when it entered the above. However, before this air cools down to 85° F. again, it will become saturated and deposit moisture.

The state of the air coming from the dryer naturally varies widely according to the speed of the air flow, the state of leaf being dried and so on. In one case it was observed that the exit gases from an Empire dryer showed wet and dry bulb readings of 100° and 120° F. respectively. This represents a relative humidity of about 60 per cent whereas the air had entered the furnace tubes with a relative humidity 87 per cent represented

by wet and dry readings of 79–82°F. When the exit air in this particular case cooled to about 100°F. it would become saturated.

The air going into the lofts is largely composed of hot air which has not been through a dryer and has a high drying capacity in spite of the fact that its temperature is lower than that of the exhaust gasses from the dryer.

During the Monsoon it often happens that with an average temperature of about 85°F. and a saturated atmosphere the leaf is liable to become sour before it has withered under natural conditions. If the chungs or racks are kept scrupulously clean and free of all leaf from the previous day it is possible to extend the withering period before the leaf goes sour.

For bad weather conditions where no withering lofts are available it is possible to improve the condition of leaf that has remained on the racks over night by passing it through a large automatic dryer like an Empire or an Endless Chain Pressure at temperature of 110°F. at a speed which discharges the leaf in 20–30 minutes.

ROLLING

The rolling system in a factory is generally controlled by the number of rollers. It may be said that with a system consisting in two half-hour rolls and a final short one before firing one big roller will cope with about 1,000 maunds pucca tea in season or four rollers can manage about 5,000 maunds. This figure only constitutes a very general guide and will not do for districts where the season is a short one and the crop crowded into four or five months. In estimating the machinery required for a factory the average heavy day should be considered and sufficient machinery put down to cope with such a day.

The system of rolling generally suggested runs on the following lines :—

10–30 minutes, light pressure

45 „ heavy „ with about :—

10 mins. on 5 mins. off.
or 7 „ „ 3 „ „

10 „ final rolling after fermentation.

This system which includes *kutch*a sorting between the first and second roll is calculated to give tip. Many gardens roll hard the whole time and make broken teas which sell for their liquors. It is not suggested that these gardens should alter their rolling process since the teas produced meet a definite demand and fit in with the blending scheme at Home. But if at any time 'tip' is needed, a light first roll will ensure that any tip present shall be visible. The final roll of 10 minutes is given for its physical effect only and in many cases no improvements has been recorded from the inclusion of this roll.

Hard rolling exposes red stalk and fibre but gives good liquors. Light rolling gives a better appearance but poorer liquors if the rolling is only continued for the same time as with the heavier pressure. The appearance of red stalk is also influenced by the wither and the fuller the physical wither the less will be the red stalk.

The speed of the roller is a factor worthy of attention. Early in the season, with only part of the machinery in use the tables often revolve at speeds in the neighbourhood of 80 revolutions per minute.

On one garden experiments were carried out in connection with roller speeds. In one case the roller made 58 revolutions per minute. The result was tippy B.O.P. of fine appearance amounting to 10 per cent of the total and an O. P. rather poorly made, amounting to 20 per cent. When the

roller worked at 78 revolutions a much smaller, less tippy B.O.P. was obtained amounting to 20 per cent. of the total leaf and a very well made O.P. amounting to 10 per cent. The liquors from the fast roll were better than those from the slow roll although it must be mentioned that the slow rolled tea had been submitted to 1,200 less revolutions of the roller during the rolling period of one hour than had the fast rolled tea.

In Ceylon the rollers revolve about 45 times a minute but the rolling period may be as long as three hours. Ceylon teas have both appearance and liquors. If the slow method of rolling were to be adopted in North-East India then a longer roll would be necessary and many more rollers needed.

The temperature of the rolling room should receive attention for this influences the temperature of the leaf in the roller. The heat mechanically generated in the roller is very small and most of the rise in temperature here is due to the heat of fermentation. During the first roll the heat developed is small partly on account of the lightness of the pressure and partly because the fermentation has not well started. The heat developed in the second roll is greater but comparatively small compared with the effect of a warm room on the leaf temperature. Thus in a cool factory after 15 minutes' hard rolling in the second roll a rise of only 3°F. was observed. In hot factories however temperatures as high as 105°F. have been recorded during the second roll. The temperature of the rolling room should be kept at the same as the fermenting room and 82°F. is suggested as a practical possibility for plains situated gardens.

The practice of making the rolling and fermenting room all one is good in that it ensures a cool rolling room although it is harder to control temperatures in a large space than in a small one and for this reason such an arrangement may not be ideal from the point of view of the fermenting room.

In some factories, air is blown into the rollers for cooling purposes. It is preferable to reduce the temperature by other means; for this practice causes a certain amount of drying and oxidation of the leaf with the production of poor colours.

The Kutcha Sorting.—The flat type of *kutcha* sorter is preferable to the rotary type which is apt to get clogged with leaf at the corners where the battens are nailed to the mesh. This leaf becomes over-fermented unless it is removed.

Unless the balls are all broken in the *kutcha* sorter or ball-breaker then the fermentation will be uneven with resulting unevenness in the infusions.

Two meshes are sometimes used in the *kutcha* sorter: the first two-thirds being of 4-mesh and the last third of 3 or 6-mesh. This arrangement is said to give a more even mixture of fine leaf than that given by a sorter containing the same mesh throughout.

FERMENTATION

The Fermenting Room.—The fermenting room should be cool and damp. The temperature of the room by no means controls that of the ferment, but it undoubtedly has a large influence on it, and should be kept at 82°F. or lower if possible. This temperature represents a practical maximum in the plains during the hot weather.

Light, so far as can be seen, has but little influence on the course of fermentation but it has become customary to keep fermenting rooms dark. This usually ensures a lower temperature in the room. It is not considered desirable that the fermenting room should be so dark as to make supervision

of work difficult. Direct sunlight or direct reflection from the overhead sky is to be avoided.

The floor of the fermenting room is best made of good cement. A lime cement, being alkaline, should be avoided for alkalinity gives dark colours. Although experiments have been made in order to test which is better, glass or cement beds, and the results generally have shown no practical difference between the teas fermented on either, still the general opinion is that it is easier to make good tea on cement than on glass.

The fermenting floor can be kept clean by washing with cold water and no accumulation of slime should be allowed. Particular care should be taken with the cleaning of the floor and as soon as any unpleasant or unrecognized odour is noticed in the room, the floor should be thoroughly washed and scrubbed with cold water and if this does not affect the removal of the smell then a dilute solution of permanganate of potash should be used. On no account should lime water or washing soda be used for this purpose since these solutions, if not completely removed by the final washings with water, will produce bad colours.

The floor should contain no corners, crevices, nor cracks capable of harbouring old leaves or tea juice. In order to facilitate the keeping clean of the floor there should be no raised nor sunk parts as beds for the leaf. Pillars in the fermenting floor should be avoided if possible since here again are angles where harmful bacteria can accumulate. A distinct camber on the floor is an advantage both as an aid to washing and also since it obviates the necessity of a definite channel to carry off any drip-water used for cooling and humidifying purposes.

The use of iron shovels in the fermenting room is to be discouraged, not that their use will appreciably alter the value of the tea but this is one of the many small points which together go to make up a measurable difference in quality.

The atmosphere in the fermenting room should be as humid as possible. The amount of moisture in the atmosphere or the degree of humidity is measured by the wet and dry bulb thermometers. These two thermometers are identical in structure except that one (the wet bulb) has the bulb surrounded by a piece of muslin kept wet by means of a wick coming from a small bottle of water. As the water on the muslin evaporates so the wet bulb is cooled. The dry bulb thermometer registers the air temperature. It will be seen that the dryer the atmosphere the quicker will the muslin round the wet bulb dry and, in consequence, the lower will be the temperature registered by this bulb. The difference then between the wet and the dry bulb will be a measure of the drying power of the air and this is actually a measure of the moisture in the air. If the difference between the two bulbs is *nil*, then the atmosphere is saturated. In this case no drying of the muslin has taken place and the relative humidity is 100 per cent. A difference of 1°F. between the two bulbs represents a relative humidity of about 95 per cent working at the average fermenting room temperature.

In the fermenting room a difference of not more than 1°F. between the wet and dry bulb should be aimed at although this degree of humidity is difficult to obtain. With a fermenting room placed on the north side of the factory, fitted with a good double ceiling and hung with wet cloths both round the perforated walls and as baffles, a high degree of humidity is possible.

(To be concluded next week.)

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea					
Mark	Pkgs.	Price	District	Week ending Sept. 25, 1926	January 1 to Sept. 25, 1926	January 1 to Sept. 25, 1925		
(A) TEA (WEEK ENDING SEPTEMBER 25, 1926)				s. d.	s. d.	s. d.		
(a) <i>Anamalais</i> —			N. India.	1 7.34	1 8.28	1 4.93		
Thayamudi ...	123	1 5½	S. India	**1 4.41	††1 7.80	††1 5.34		
Nullamudi ...	178	1 5¼	Ceylon...	1 7.13	1 8.47	1 7.48		
Mukkottumudi ...	279	1 5	Java ...	1 2.45	1 4.36	1 0.66		
Thonimudi ...	318	1 4¾	Sumatra.	1 6.30	1 5.34	1 4.22		
Kallyar ...	263	1 4¼	Nyassa- land.	Nil.	1 5.63	1 1.05		
Sholayar ...	165	1 4¼	Total ...	*1 6.87	†1 7.88	†1 5.42		
Pachamalai ...	93	1 4¼						
Selaliparai ...	123	1 4						
(b) <i>Central Travancore</i>			(B) COFFEE					
Caradi Goody ...	20	1 6	SPECIAL CABLE, LONDON, OCTOBER 27, 1926 'A' QUALITY 160s. MARKET NOMINAL					
Stagbrook ...	133	1 4¾						
Glenmary ...	102	1 4¾						
Haileyburia ...	97	1 4½						
Thungamullay ...	100	1 4¼						
Fairfield ...	33	1 4¼						
Kuduakarnam ...	150	1 4						
Dymock ...	81	1 4						
Mlamalla ...	73	1 4						
(c) <i>Kanan Devans</i> —							(C) RUBBER	
Sevenmallay ...	185	1 5¼						
Kalaar ...	255	1 5						
Perriavurrai ...	163	1 4¾						
Munnar ...	84	1 4½	The London 'Spot' quotation for Plantation first Latex Crepe on Tues- day, October 26, 1926, was 20¾d.					
(d) <i>Mundakayam</i> —								
Yendayar ...	74	1 3¼						
(e) <i>Nilgiris</i> —								
Prospect ...	179	1 8½						
Terrania ...	47	1 7½						
Coolacumbie ...	82	1 5¼						
(f) <i>Nilgiri-Wynaad</i> —								
Seaforth ...	84	1 4½						
(g) <i>South Travancore</i> —								
Braemore ...	101	1 4½						
Hereford ...	117	1 3¼						
Merchiston ...	119	1 2¾						

** Based on 4,932 packages.

†† „ „ 131,734 „

†† „ „ 137,634 „

* Based on 88,128 packages

† „ „ 2,413,615 „

† „ „ 2,271,031 „

(b) *Précis of Reports on the London Market received on Monday, October 25, and covering the seven days ending Tuesday, October 5 :—*

(1) *Tea.*—We have to postpone until next week our selection of the best prices obtained at the Auctions held during the week ending Saturday, October 2nd, since the Tea Brokers' Association's report apparently missed the Mail. We gather however from reports to hand from other sources that the Auctions in question indicated that the rather apathetic feeling which had been dominating the market during the previous few weeks, had disappeared. Prices in consequence showed an all round increase of about $\frac{1}{2}d.$ per pound ; and South Indians, sharing in the general advance, showed an average of $1/5\cdot27d.$ as against the average of $1/4\cdot41d.$ recorded for the week ending September 25.

(2) *Rubber.*—During the seven days under review stocks increased by 1,479 tons to 36,065 tons, and the price was slightly easier in the region of $20\frac{1}{4}d.$ to $21d.$ Since, it was calculated at the end of September that (if the average price for the quarter ending tomorrow was to reach the pivotal point of $21d.$) the average price throughout October would have to remain at $1/10\frac{1}{2}d.$; it would seem inevitable that a cut will take place for the November-January quarter under the new regulations which, as indicated in our Editorial Note the Colonial Office promulgated last week. The third paragraph of the Note in question will show that the deduction, if it takes place, will be 20 per cent; or in other words that the percentage of Standard Production exportable at the minimum rate of duty will be reduced from 100 to 80.

(3) *Coffee.*—On October 4 the London stocks of African, Indian and other kinds respectively were given in bags as 19,978, 10,042 and 72,685 as against 20,070, 33,151 and 110,516 on the corresponding date last year. Considerable apathy prevailed in the market during the week under review and the only Coffee which seemed in appreciable demand was London Cleaned Columbian. No East Indians were on market at the Public Auctions ; and it would appear that practically all the remainder of last season's crop has been disposed of by private contract. The nominal quotation for East Indians is given at from 154s. to 170s. for Middling to Fine 'A' Size.

II. Weekly Rainfall Statement

From Sunday, October 17, 1926 to Saturday, October 23, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	2·79	64·52	67·31	19. Naduvattam	1·17	91·44	92·61
2. Kalthuritty.	5·42	102·66	108·08	20. Coonoor ...	2·88	22·22	25·10
3. Tenmalai ...	5·68	100·83	106·51	21. Kotagiri ...	2·81	38·17	40·98
4. Mundakayam.	4·03	142·67	146·70	22. Ootacamund	2·09	37·93	40·02
5. Peermade ...	3·94	171·34	175·28	23. Yercaud ...	N.R.	39·74	N.R.
6. Twyford ...	3·23	190·46	193·69	24. Devala ...	2·68	143·09	145·77
7. V'periyar ...	1·22	75·76	76·98	25. Gudalur ...	1·22	N.R.	N.R.
8. Kalaar ...	5·46	189·28	194·74	26. CALICUT ...	2·41	118·65	121·06
9. Chittuvurrai	2·54	34·43	36·97	27. Kuttiyadi ...	N.R.	N.R.	N.R.
10. BODI'KANUR	7·32	10·20	17·52	28. Vayittiri ...	4·97	179·53	184·50
11. COCHIN	1·58	110·10	111·68	29. Manantoddi.	N.R.	101·46	N.R.
12. Mooply Valley,	3·15	126·18	129·33	30. Billigiris ...	0·35	45·38	45·73
13. Pachaimalai.	4·12	116·00	120·12	31. Sidapur ...	0·15	72·91	73·06
14. Mudis ...	5·64	221·92	227·56	32. Pollibetta ...	2·57	94·35	96·92
15. Nell'pathy...	5·54	87·27	92·81	33. Somwarpett.	0·63	69·25	69·88
16. POLLACHIE.	5·35	21·90	27·25	34. Ballupete ...	0·11	65·29	65·40
17. Manjeri ...	5·34	125·40	130·74	35. MANGALORE	1·21	112·77	113·98
18. Nilambur ...	2·66	113·78	116·44	36. MADRAS ...	0·49	13·46	13·95

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL--(*continued*).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, October 28, 1926)

(A) EXCHANGE

The market during the last week has been a peculiarly uninteresting one, there being only very little business in this market daily ; and judging by daily wires from Bombay and Calcutta, the position there is almost equally stagnant. Rates since last Thursday have steadily sagged from 1s. 5½*d.* for T.T. to 1s. 5 13/16*d.*, and for three months credits 1s. 6 3/16*d.* for the mail down to 1s. 6½*d.* There does not appear to be any particular reason for the drop except lack of business. The best rates quoted to-day are :—For T.T. on London 1s. 5 13/16*d.* October, 1s. 5 27/32*d.* November, 1s. 5½*d.* first half and 1s. 5 29/32*d.* second half December, 1s. 5 15/16*d.* first half January and 1s. 5 31/32*d.* from 16th January to end March with 1s. 5 15/16*d.* April, 1s. 5 29/32*d.* May and 1s. 5½*d.* June/September, For three months Approved Credits, there are buyers at 1s. 6½*d.* for the mail, 1s. 6 5/32*d.* first half and 1s. 6 3/16*d.* second half November, 1s. 6 7/32*d.* first half and 1s. 6¼*d.* second half December, 1s. 6 9/32*d.* first half and 1s. 6 5/16*d.* second half January, 1s. 6 11/32*d.* February/March and 1s. 6 5/16*d.* April. The market, generally speaking, remains very dull.

(B) MONEY

Here too, there is no change. We quote Call money at 1 per cent, three months 2 per cent, six months 3 per cent and twelve months 4 per cent. The Imperial Bank rate is unchanged at 4 per cent and the percentage of cash to liabilities is up to 44.78 as compared with 43.75 a week ago. The Franc is better on the week at 159¼ as compared with 161, and the Dollar is quoted to-day 4.84 11/16 against 4.84 13/16.

IV. Selected Madras Market Quotations

For the week ending Wednesday, October 27, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10	10½
Bank of Mysore Rs. 100	160	...
Indian Banks (Rs. 100) Rs. 50	65	66
Indian Banks (Rs. 100) Rs. 10	13	13½
Central Bank (Rs. 50) Rs. 25	27½	28½
Imperial Bank of India (Rs. 500)	1430	1445
" " " (Rs. 125)	360	365
Chartered Bank £5	£ 19-10-0	£ 20-10-0
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 29-15-0	£ 30-15-0
" " (£25-B) £12½	£ 29-15-0	£ 30-15-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 46-12-6	£ 48-2-6
P. and O. Bank £10	£ 10-1-3	£ 10-11-3
MILLS		
Bangalore W. C. and S. Ord. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	92	...
Buckingham and Carnatic Ord. Rs. 100 ... ..	...	200
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	123	123½
Coimbatore Rs. 100	160 x.D.	...
Coimbatore Malls Rs. 85 ... ..	...	85
Gokaks Rs. 100	110	...
Maduras Rs. 100	410	...
INDUSTRIALS		
Deccan Sugar Ord. Rs. 500	860	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100 ... ..	...	106
E. I. Distilleries and Sugar Factories Ord. £0-16-0	15s.	17s.
E.I D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	63	67
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-12-0	4
Singareni Collieries, Rs. 10	10	10½
W. E. Smith Ord. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	90
Spencers Ord. Rs. 100	150	155
Spencers 6 per cent. Prefs. Rs. 100	97	99
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	116
Tata Iron and Steel Ord. Rs. 75	54	56
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	70	72
United Breweries Ord. Rs. 75 ... ..	...	135
United Breweries 6 per cent. Prefs. Rs. 100	90	94
PLANTING		
Cochins Rs. 15	54	60
Eddivannas Rs. 15	30	31
Kalajas (Rs. 15) Rs. 7	6½	7½
Kinalurs Rs. 10 ... ..	...	35
Kuttiadis Rs. 15	19	20
Malankaras Rs. 30	112	116½ c.D.
Peermades Ord. Rs. 10	29	30
Peria Karamalais Rs. 15	50	52
Periasholas Rs. 10	7	7½
Periyars Rs. 10	22	24
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	3½	4½
Thodapuzhas Rs. 10	32	32½
Thirumbadis Rs. 10	21	22
Tropical Plantations Rs. 22½	22½ c.D.	...
United Nilgiris Rs. 100	110	115
Vellamalais (Rs. 15) Rs. 13	16 c.R.	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 45] SAT., NOVEMBER 6, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	... 747	N. Coorg Notes ...	... 755
Personalia ...	... 749	Letter to the Editor—	
Representative Planters Teams.	750	Bordeaux Mixture ...	756
The U.P.A.S.I. Benevolent		Tea Manufacture ...	756
Fund ...	... 751	Commercial and Meteorological.	761
W. C. P. A. Meeting ...	... 752		

EDITORIAL NOTES

Mr. H. H. English asks us to say that he finds he was incorrect in stating in paragraph 8 of the Mysore Labour Division Control Committee's report, which we published on page 725 of the issue of October 23, that the Coorg Labour Act was 'subject to advances being reduced.' He now finds that this is not the case; and understands that it is valid for five years, at the end of which period it will be repealed.

Planters' Teams Last month, and also a year ago, one frequently heard in circles where the Rugger tournament was being discussed some such remarks as this :—' Oh, it WAS sporting of the Planters to put in a team. INDIVIDUALLY they were splendid; but some of them had actually never seen, let alone played together with, one another until they arrived in Madras for the Tournament; and they were, therefore, up against an almost impossible handicap in a game where COMBINATION is the all in all' Most of our Readers will, we think, agree that such a view sums up fairly accurately the situation so far as it affects Representative Planting Teams. But, has such an unsatisfactory situation to be endured? Can it not be alleviated or even cured? Cannot the handicap under which Planting teams now labour be removed; or, at any rate, very appreciably reduced? We have no doubt that considerable interest will be evinced in the way in which a Correspondent has dealt with these questions on Page 750.

Mr. H. W. Roy Bertrand, Chairman of the Kalutara District Planters' Association, has supplemented the interview he recently (as reported on Page 639 of our issue of September 25, 1926) gave *The Times of Ceylon* by a lecture at the Head Quarters of the Ceylon Planters' Association at Kandy with the

Hon'ble Mr. F. A. Stockdale, the Director of Agriculture, in the Chair. He pointed out that the Dutch East Indies had no less than 1½ million acres under rubber as against 450,000 acres in Ceylon, and were rapidly opening up fresh rubber tracts. He emphasized that the area of Java and Sumatra was 175,000 square miles and of Borneo 300,000 square miles making a total area of some twenty times as great as that of Ceylon; and that, though in Java further large extensions were not anticipated, yet Sumatra and Borneo possessed vast areas of highly fertile, deep rich, alluvial soil with very little stone and a rainfall of from 80 to 120 inches where rubber could, and he had no doubt would, be grown in future years. Peasant Proprietors would, he said, participate to no small extent in the expansion which he foresaw. The exports of Native rubber from the D. E. I. rose from 6,000 tons in 1921 to 125,000 tons in 1925, and that enormous rise of approximately 2,000 per cent gave one an indication of the great economic significance which the small holders would yield in times to come.

The Dutch, he continued, fully realized that there was little hope of increasing yield by cultivation alone, and that improvement of type was also a *sine qua non*. The Department of Agriculture had now countless thousands of Hevea mother trees under observation, and one paragon which was still going strong had yielded no less than 3,000 buds. The total area under Budded rubber in the Dutch East Indies was now between 50,000 and 100,000 acres; and one of the biggest companies had already 14,000 acres of Budded rubber and selected seedlings, and proposed next year to add 17,000 acres more. Mr. Bertrand concluded his lecture by appealing to the Ceylon Government to come to the rescue of the Planters, who had already planted up the greater part of their estates, by affording them a certain amount of land on which they could test out their mother trees.

Mr. George Brown, the Chairman of the Planters' Association, in supporting Mr. Bertrand's appeal asked the Director of Agriculture to take the necessary action to bring the situation to the attention of the Government which, he thought, might be persuaded to grant a certain proportion of the Rs. 2 lakhs which stood at the credit of the Rubber Restriction Fund for the purpose of establishing Nurseries and Supply Stations from which the future Planting requirements of the Island might be met.

In our last issue we stated that on the Wednesday of last week Col. Amery announced in the House of Commons that a decision as to what, if any, action was necessary with regard to the unused Ceylon and Malayan coupons would be shortly made. Though so far as we know no further announcement on the subject has yet emanated from the Colonial Office authorities, we now notice that the Governments of Ceylon and Malaya notified at the beginning of this week that the validity of export coupons dated on or after February 1, 1927, would expire at the end of the third month after the conclusion of the period in respect of which they are issued. We believe that coupons are issued every month in Ceylon but only every quarter in Malayan; and, if this is correct, the new regulations will have the effect of limiting the 'over all' validity of export coupons to six months and four months respectively in Malaya and Ceylon.

We have to date seen no indication that any change in the assessment of Standard Production is to be made,

PERSONALIA

BIRTH

POWELL.—At Ootacamund, on October 29, 1926, to Rosemary, the wife of F. H. Powell of Kaliyar Estate, the gift of a daughter.

DEATH

PARK.—At Ambanaad Estate, Kalthuritty P.O., Travancore, on October 29, 1926, Hamish Urquhart, aged 13 months, son of Mr. and Mrs. J. W. Urquhart Park.

ARRIVALS

MR. F. SIMMONS, Group Manager of the Bombay Burma Trading Corporation's Estates in the Anamalais, has returned from England; and, before proceeding to his Station, is remaining for a few days in Madras.

MRS. N. C. WHITTON of the Sallebile Estates and child returned from England by the S. S. *Nagoya* on Wednesday last.

MR. R. W. FREMLIN of Buskull Estate, Mudigere, arrived last Wednesday from Home.

MR. V. L. WYNARD WRIGHT, A.M.I. MECH. E., Manager of the Hunsur Coffee Works, is due in Colombo to-morrow after Home leave.

MAJOR BROCK, O.B.E., V.D., with MISS KATHLEEN BROCK, embarks on the S. S. *Herefordshire* at Liverpool on the 19th instant on return from leave.

ON THE SICK LIST

We are glad to say that MRS. WADDINGTON continues to make satisfactory progress at the Lady Willingdon Nursing Home.

MRS. C. GODLIE TAUBMAN has already left the Home; and is making a short stay at the Connemara Hotel before returning to Central Travancore.

OTHER PLANTING NEWS

We learn that CAPT. E. M. NIXON has purchased the Chipragooty, Bettagudy and Wartygundy Coffee Estates, now to be known as 'Westward HO! Estates' and that he proposes to plant them up in Cardamoms and Tea.

ITEMS OF INTEREST

We understand that the MARQUIS OF LINLITHGOW, who is now in India, as President of the Royal Commission on Agriculture, has definitely refused an invitation to accept the Chairmanship of the Conservative Party which has become vacant owing to the appointment of Col. Jackson to the Governorship of Bengal.

MR. A. A. L. PARSONS, Financial Commissioner of Railways, will be in Madras next week from Wednesday to Saturday inclusive, and again from Thursday the 25th instant, to Saturday the 27th idem; sandwiching between these two visits a tour of inspection of South India during which he will touch, amongst other places, at Trichinopoly, Shencottah, Trivandrum and Cochin.

MR. R. D. ANSTEAD, Director of Agriculture, and formerly Deputy Director of Agriculture for Planting Districts, is to deliver a lecture under the auspices of the Madras Geographical Association on 'Planters' crops. Their distribution and management' with the Marquis of Linlithgow in the Chair. The date and hour of this Meeting will be announced in due course.

U.P.A.S.I. SPORTS CLUB

REPRESENTATIVE CRICKET AND RUGGER TEAMS

(CONTRIBUTED)

It is greatly to be hoped that the United Planters' Association Sports Club will at an early date go thoroughly into the question of Representative Planters' Teams, with a view to stimulating more interest in our matches with other Clubs, and in an endeavour to find out the best methods of giving our men more practice in the games they are asked to represent us at.

Living as we do in an age when Sport plays such a large part in the life of our Empire; it seems to us to be a pity—now that we have the organization in our Sports Club and the material in our younger Planters—that just for the want of practice and training our teams do not meet with the successes which, without doubt, could be theirs; if only adequate opportunities for such practice and training were afforded them. This was very evident in the Cricket and Rugger matches which our teams played recently in Madras. Unquestionably our men in the circumstances did exceedingly well.

It is now for all of us, who are interested in our Sports Club, to see if we cannot put opportunities for practice and training in our men's way, to enable them to turn out as our representatives without being handicapped by lack of these all-important factors. Here our thoughts naturally turn to the Districts from which our men come. Are facilities for practice given them by the provision of suitable grounds? In some districts, as for instance The Anamalais and Coorg, we know that this is so; but in other districts our youngsters are very greatly handicapped in this respect, and we cannot think of any reason why this should not be put right. A man who is physically fit to play Rugger, Soccer or Hockey, or has the stamina to last through a busy day's Cricket, cannot be nearly so liable to an attack of malaria as the youngster whose only form of exercise is strolling round Estate paths with just an occasional game of Tennis.

Then, in certain districts it is no one's business to find the where-withal to play games with, and it would appear a thoroughly sound suggestion that each District representative of the Sports Club should be empowered to indent on the Club for Cricket bats, Footballs, Hockey sticks, etc., if he can show the Committee that the number of members in his District warrants such expenditure, and that there is a real demand for such equipment.

Again we think that Auxiliary Force Camps or Meets—however small—should wind up with a game of some sort each day. Commanding Officers would find it to their advantage to co-operate with the District Representative of the Sports Club in arranging Cricket net-practices, Hockey 'Sixes', Rugger 'Sevens' (The technique of this Game was described on Page 307 of our issue of May 8, 1926. *Ed.*), or even a bout of passing with a rugger ball; which would serve the dual purpose of attracting men to these camps, and give them practice at games which after all our youngsters ought not to be allowed to forget.

So much then for opportunities for practice. But it is also desirable that every opportunity within reason should be taken for playing more matches. As regards Cricket, it is understood that a suggestion has been made that the Planters' team which comes to Madras to play the M.C.C. in October should first play a one day match against an Indian XI; and that the M.C.C., in their usual generous way, have stated they would be pleased to place their ground at Chepauk at the disposal of

the Planters for such a purpose. The writer thinks this offer ought certainly to be accepted. Then as regards Rugger it seems more and more apparent that it is scarcely practicable to hold the 'Carver' Rugger Cup Competition during the Ooty 'Week' in February, and yet expect men to maintain a keen interest in Rugger for the Madras Tournament in the following October. A better way would surely to be hold the 'Carver' Cup Competition at Coimbatore a convenient centre—during the latter half of September; and from the competing sides select a strong representative team which would be expected to keep itself in training to come to Madras and compete in the Madras Gymkhana Club's tournament early in the following month.

The Writer unhesitatingly commends these proposals to the Sports Club Executive for their serious consideration; as he feels that, if they were carried through, it would not, judging by the excellent account which the Planters gave of themselves individually last month, be long before the M.G.C.'s trophy would come the way of the Planters.

SOUTHERN INDIA PLANTERS' BENEVOLENT FUND

'Men are Willing but Forget'

At the last Annual Meeting of the Fund it was urged that greater publicity should be given in the *Chronicle* as to how subscriptions were coming in, and in accordance with that wish the following statement is published :—

SUBSCRIPTIONS RECEIVED FROM APRIL 1 TO OCTOBER 31 (INCLUSIVE.)

	1925			1926		
	Men	Estates	Amount	Men	Estates	Amount
			Rs.			Rs.
Anamalais ...	44	12	*1,285	...	...	*166
Central Travancore ...	23	1	*295	29	...	440
Coorg ...	25	11	*610	22	14	*675
Kanen Devans ...	4	...	56	3	...	46
Mundakayam ...	2	4	2,317	1	...	7
Mysore ...	14	5	310	10	1	125
Nelliampathies ...	...	...	...	5	...	50
Nilgiris ...	2	1	220	1	1	360
Nilgiri-Wynaad ...	3	2	105	3	...	30
Shevaroy's ...	6	...	60	...	...	...
South Travancore ...	7	10	320	8	10	330
West Coast ...	16	3	280	24	10	1,845
Wynaad ...	4	7	185	10	1	130
U.P.A.S.I. ...	4	...	40	4	...	40
Firm Members ...	14	...	425	9	...	350
Total to date ...	165	56	6,508	129	37	4,594

From the above it will be seen that subscriptions have come in slowly this year, probably owing to the cause we quote as a sub-heading; but there is plenty of time to bring up the total to that of last year and more. Send your subscription in, and **do it now.**

MADRAS,
November 1, 1926

H. WADDINGTON,
Secretary.

*Includes a donation from the Association concerned.

THE WEST COAST PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of an Extraordinary General Meeting held at the Mooply Valley Club
on Saturday, October 16, 1926, at 10.30 a.m.

Present

Messrs. C. E. M. Browne (*Chairman*), H. J. Walmesley, H. R. Carson Parker, M. R. Fetherstonhaugh, J. T. Murray (*Honorary Secretary*), and as visitors E. Simpson, F. A. Caryll, G. D. Olivier, W. F. Campbell and J. G. Mitchell.

Before proceeding with the business before the Meeting a vote of condolence with the relations of the late Mr. R. H. Hitchcock, C.I.E., M.B.E. was passed, all members standing.

1. The minutes of the last meeting were read and confirmed.
2. The balance sheet for the year 1924-25 was adopted.
3. *Personal Membership Subscriptions*.—A resolution was passed that the new subscription rate of Rs. 5 be retrospective as from April 1, 1926.
4. *West Coast Estates not Members of a P. A.*.—The Honorary Secretary was instructed to write to the Managers of the Kerala Tea Co., Limited Kanambra and Perikanny Estates; pointing out the advantages of the Scientific Department lately formed and inviting them to become members of the W. C. P. A.

5. *S. I. Committee of R. G. A.*.—Proposed by Mr. H. J. Walmesley and seconded by Mr. H. R. Carson Parker that the two representatives of the Association on the R. G. A. Committee be elected at the Annual General Meeting to this Association. *Passed unanimously.*

Mr. C. E. M. Browne was elected to the vacancy on this Committee, in place of Mr. H. J. Walmesley who automatically becomes Chairman.

A copy of the rules of the Committee was laid on the table.

6. Report of the Delegates to the U. P. A. S. I. Annual General Meeting 1926

Owing to the early date of this meeting the Book of Proceedings of the General Meeting of the U. P. A. S. I., without which this report is not complete, has not yet been received, and we suggest that in future the October meeting of this Association should not be held until the end of the month.

Accounts.—Your delegates supported the resolution proposed by the Mundakayam P. A. that the balance of the money raised for our Mycological Department be carried forward, and not transferred to General Funds as was proposed. The reason stated for transferring our balance to General Funds was that the special contribution made by Rubber Interests had not been paid for the full cost of the Mycological station. This claim was definitely settled to date at the meeting held in August 1923; when the Chairman of the U. P. A. S. I. confirmed Mr. Murphy's statement that up to that date rubber had paid for the full cost of the Mycological Station (*vide* Proceedings of U. P. A. S. I., 1923, page 64). If we take the Secretary's figures for 1923-24 and 1924-25 we find that we overdrew Rs. 4,214 but this should be reduced by income from sale of Mooply rubber (Rs. 1,723) and by something from sale of Tenmalai rubber.

Last year's figures are as follows:—

1925-1926					
INCOME			Rs.	EXPENDITURE	Rs.
Rubber cess	...	...	24,764	Mycological Station	17,356
R. G. A.	...	...	3,486	General Scientific Office	2,052
Share of Government contribution (Secretary's figure)	...	...	8,765	Tenmalai Station	4,348
Sale, Mooply rubber	...	...	1,138	Mooply „	4,506
Do. Tenmalai „	...	...	...	* Periyar and Cochin bad debt	4,206
				Excess of income over expenditure	5,685
			
Total	...		38,153	Total	38,153

Your delegates were strongly of opinion that the excess of income over expenditure should be earmarked for the purpose for which it was collected. There must continue to be constant disputes about the income from all these Special Cesses until they are kept in separate accounts; and, if this is done, there should be no difficulties of this kind in future. It should be noted that the Labour Department cess produced Rs. 48,000 less than was expended by this department, a shortage of 20 per cent of the total expenditure which will have to be met, presumably, from General Funds.

Scientific Department.—Your delegates, and those of the Mundakayam and S. Travancore Planters' Associations, were unanimous in supporting the proposals for the future working of the Scientific Department and for the engagement of an Assistant for Rubber, and undertook to meet the additional cost incurred. Your delegates had the pleasure of hearing the views of Mr. Carpenter, the Chief Scientific Officer from Tocklai, on the running of a Scientific Department; and he made it quite clear that any visiting to be done must be done by the Senior Scientist, and that this should not interfere greatly with his work as it was more for him to lay out and direct lines of work and research, and to leave most of the detailed investigation to his Assistants. Your delegates and those from S. Travancore wished to see more of Mr. Ashplant who has not been able to do any visiting in India for two years, and we were convinced of the necessity for an Assistant.

Political.—Your delegates were instructed to support the proposal of Mundakayam for abolishing the provision for a paid politician in the Madras Legislative Council. In course of discussion it came out that, though the Native States of S. India now dealt direct with the Government of India, the proceedings in the Madras Legislative Council affected opinion in the Legislative Council of these states more than any proceeding of the Government of India. The Planters' representatives on the Coorg and Cochin Legislative Councils both stated that constant reference was made in these Councils to the Proceedings of the Madras Legislative Council, whereas practically no reference was ever made to the Proceedings of the

* In making up his account the Secretary has incorrectly debited the Mycologist Station with the whole of the amount written off i.e., Re. 1 per acre, but in crediting the station with the cess only ten annas an acre has been correctly credited. This is obviously a mistake.

Government of India. Mr. Congreve also spoke very convincingly on the subject. The Mundakayam Planters' Association asked for permission to withdraw their resolution, in which your delegates also concurred.

Sports Meeting.—It was decided to hold the Sports Meeting in the second half of February in Ootacamund. As instructed your delegates did not oppose the fixing of a date which would suit the Coffee Districts, but it appeared that in this particular season March would be no more convenient for the coffee districts than would February, and as the latter half of February suited every one else they supported this proposal.

War Memorial.—The Anamalais Association proposed that the Planters' Memorial be placed in St. Stevens' Church, Ootacamund; and, though there are undoubted objections to this, your delegates had no special instructions, and since the meeting in general appeared to support the proposal, they did not oppose.

There were no other subjects brought forward which affected in particular the interests of this Association, and your delegates do not propose to further occupy your time, but to leave you to read the particulars of the many interesting discussions which took place in the printed proceedings of the meeting which will shortly be in your hands.

H. J. WALMESLEY,
H. R. CARSON PARKERY,
Delegates.

7. *Delegates' Expenses.*—A vote of thanks to the Delegates was proposed from the Chair and carried unanimously and the Honorary Secretary instructed to pay the delegates' expenses of Rs. 300 each.

8. *U.P.A.S.I. Accounts.*—Proposed from the Chair and carried unanimously that this Association strongly protests against the principle of transferring to the General Funds of the U.P.A.S.I., sums subscribed for a particular subject such as the up-keep of the Rubber Mycologist's Station, and appoints a Sub-Committee to investigate Revenue and Expenditure on the Mycological Station as from the reorganization of the U.P.A.S.I. in 1918; and do recommend that these monies be kept in a separate account, which be published with the annual account of the U.P.A.S.I.

A copy of above resolution to be sent to the Mundakayam and South Travancore Planters' Associations.

The Sub-Committee was appointed; consisting of two members of the S.I. Committee of the R.G.A. and the Honorary Secretary.

9. *Advances to Labour.*—A letter was read from the Secretary, U.P.A.S.I., regarding the resolution passed at the U.P.A.S.I. Annual General Meeting to consider the reduction of the advances to Labour, and was recorded.

10. *Benevolent Fund.*—The Honorary Secretary was instructed to request the Managers of Companies that have not subscribed to the fund to draw the attention of their Directors to the object of the Fund, and point out that five companies have subscribed generously.

It was also agreed that the Honorary Secretary write to the Secretary, U.P.A.S.I.; and request him not to collect subscriptions direct from members of this Association.

The Honorary Secretary reported that he had collected Rs. 1,050 from Estates and Members; and that approximately Rs. 800 had been remitted to the U.P.A.S.I. direct, making a total of nearly Rs. 1,900 from this Association.

11. *Copper Sulphate.*—Read letter from the Secretary, U.P.A.S.I., to Mr. Walmesley, regarding our application for free import of Copper

Sulphate used for spraying ; and it was noted with regret that owing to Estates not replying to the Secretary's enquiries as to the amount used no progress had been made. It was suggested that enquiries as to imports might be made through the chief importing firms on the coast. Of the total 230 tons advised to the Secretary ; the amount from Estates represented at this Meeting amounted to over 100 tons.

It was the opinion of the Meeting that 400 tons would be much nearer the mark than the 230 tons stated by the Secretary.

12. *Packing of Rubber*.—Copies of the correspondence between the Secretary, R.G.A. Committee of S.I., the Cochin Chamber of Commerce, and the Clan and Ellerman Agents were read, and a resolution proposed by Mr. C. Barton Wright and seconded by Mr. H. R. Carson Parker that this Association strongly protests against the clause which the Shipping Companies propose including in the Bills of Lading regarding rubber packed in Country Chest ; the Executive Committee of the U.P.A.S.I. and the S.I. Committee to take the matter up strongly.

13. *Correspondence*.—Was laid on the table.

14. *Votes of Thanks*.—With a vote of thanks to the Chair and to the Mooply Valley Club for the use of the room, the Meeting terminated.

J. T. MURRAY, *Honorary Secretary*.

C. E. M. BROWNE, *Chairman*.

DISTRICT NOTES

N. Coorg

Glorious sunshine and a dry road to Hosur Bane all added to the pleasures of our final Paper Chase meeting of the season.

This year there were so few entries that only two events took place ; but nevertheless the enthusiasm of those riding was still as great as ever. In spite of the long distance, the Chief Commissioner of Coorg and Mrs. Pears very sportingly patronized the little meeting.

BALL MEMORIAL CUP

2½ MILES

(1) FOX TROT	...	Mr. C. S. Iron.	Owner up	...	(12·7)
(2) FIANCÉE	...	„ A. M. Webb	„ „	...	(11·7)

Also ran :—BARONET, GINGER.

COORG PONY STEEPLE CHASE

(1) RHODA	...	Mr. W. E. Dickinson—
		„ J. O. F. Maurice up.
(2) FOX GLOVE	...	„ J. N. Sprott—owner up.

In the first race Fox Trot reached the first fence before Fiancée—Baronet and Ginger collided. Fiancée soon took the lead and was well in front, but reaching the top corner did her usual trick of running off the course—Fox Trot then led, but Fiancée soon followed, and once more took the lead, and many thought she was a sure winner ; but the top corner had to be faced again, and her rider foolishly still took the lead, and again ran out—thus giving Fox Trot a clear run home.

In the second race Rhoda took the fence first and was gradually increasing her lead, when she refused ; but Fox Glove did likewise. After a second attempt both cleared, and Rhoda soon found her place again and led till the end—eventually winning by 4 lengths.

The spectators and riders later returned to Belur Club, where Messrs. Wilkins, Iron and Reid were At Home to lunch. After a few well chosen words by Mr. Wilkins, Mrs. Pears kindly gave away the Ball Memorial Cup to the winner—Mr. C. S. Iron—amid much applause.

Yours, etc.,

‘ YOUR HONORARY CORRESPONDENT.’

LETTER TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' Views)

Bordeaux Mixture

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

SIR,

If you will be good enough to insert this letter in your next issue, I trust some experienced sprayer will give me the information I desire.

I want directions for making BORDEAUX MIXTURE,—quantity required per acre—and number of trees a cooly with one 'HOLDER' pressure sprayer is capable of doing in a day.

I believe after crop is the best time for spraying to prevent

(Yours, etc.,)

MYSORE,

'LEAF DISEASE.'

October 27, 1926.

T E A

IMPORTANT POINTS IN MANUFACTURE

BY

P. H. CARPENTER, F.I.C., F.C.S.,

Chief Scientific Officer

AND

C. R. HARLER, B. Sc., F.I.C.,

Chemist, Indian Tea Association.

(Concluded from page 742, issue of October 30, 1926)

Some factories have installed humidifiers similar to those used in Cotton Mills. These humidifiers force water under high pressure through a fine jet and the result is a cloud of water vapour. A cheap, makeshift humidifier may be constructed as follows. The lance and nozzle of an ordinary Knapsack sprayer is placed downwards in the centre of a cylinder of metal about 10 inches in diameter and 18 inches long. Water at about 100 lbs. pressure is forced through the nozzle and the result is a very fair imitation of the spray produced by a humidifier. Some of the spray collects as drops which may be caught by a cone placed below the cylinder and carried off in a pipe. A little adjustment of this simple apparatus to suit local requirements will produce a machine capable of raising the humidity of the fermenting room to 100 per cent. Head space of about 15 feet is necessary otherwise the area over which the machine produces an effect is much reduced.

The influence of humidifiers on colours is discussed later but it must be mentioned that as the air becomes loaded with water vapour so the temperature falls. How far the good colours are due to high humidity and how far to low temperatures has not yet been estimated.

Spreading in Time.—The thickness of spreading of the fermenting leaf and the time of fermentation are factors which should be considered together. To a large extent the fermentation process may be regarded as an oxidation process which is hastened both by temperature and also by the amount of oxygen (i.e. air) available.

As the fermentation proceeds, briskness or pungency gives way to flatness and at the same time strength is gathered. We are thus faced with the problem of staying the loss of briskness or pungency whilst the tea has time to take on strength. This may, in a way, be achieved by thickening the spreading which in effect reduces the air supply and slows up certain chemical reactions connected with loss of briskness. If the spreading is thicker than about 5 inches then there is a danger that the air supply will be so reduced and the chemical reactions proceed so slowly that the tea remains green. On the other hand when the reactions do proceed there is a danger with thick spreading that the heat developed will not be able to escape. The result is a rise in temperature and a consequent hastening of the chemical reactions. The problem is thus a complicated one.

One way out of the difficulty is to spread thinly—about $2\frac{1}{2}$ inches—and to put wet cloths over the ferment. The air supply is thereby restricted and at the same time the leaf does not get hot. At the end of the season when lower air temperatures are experienced the time of fermentation must be lengthened or the spreading thickened, or both. As an alternative the air supply may be increased, i.e., the spreading may be thinner, provided the atmosphere of the fermenting room is humid.

The temperature of the fermenting leaf should be as near 82°F . (or lower) as possible when it is first put on the fermenting beds. If the leaf as it comes from the roller is put through an efficient ball breaker installed in a cool place, it will certainly cool to a low enough temperature. During fermentation the temperature rises to a maximum at which it remains for some time and then falls. The maximum temperature should not be above 86°F .

The time of fermentation must depend on the chemical state of the leaf when it leaves the withering racks. Quite apart from this, however, different gardens seems to produce leaf requiring different types of fermentation and experiments are needed on each individual garden. All experiments however must be carried out with forethought and care and only one factor should be varied in each experiment. Results must be interpreted with caution and each experiment must be pushed to a conclusion. A pointed example may be quoted. At one factory the teas produced were weak and the suggestion was made to lengthen the time of fermentation. Three experiments were carried out with the leaf fermenting for 3, $3\frac{1}{2}$ and 4 hours. The 3-hour tea was brisk and weak and valued at Re. 1 (nominal). The $3\frac{1}{2}$ -hour tea was less brisk but stronger and valued at 14 annas whilst the 4-hour tea, was still less brisk, but notably strong and valued at Re. 1-0-6. The second tea was mediocre with no stand out briskness or strength and thus the price was not intermediate between the other two but below them. If a single experiment only had been tried and the fermentation increased by half an hour the wrong conclusion might have been drawn.

Colour of infused leaf.—The colour of the infused leaf is important. The green colour often obtained may be due to an insufficient wither, not enough air in the fermenting leaf or a too short fermentation. Dark green colours are often the result of a dry breeze blowing on the leaf. Uneven colours result from insufficient ball breaking after the rolling process. A bright green infusion usually goes with a brisk tea and indicates under fermentation. Such teas when over-brisk are often

called 'raw' or 'green.' A dark green infusion goes with a flat tea and often denotes underwithering accompanied by over-fermentation.

Bright colours are obtained from fully withered leaf if the fermentation is a short one but it is easier to obtain good colours from leaf withered on the light side. Thin spreading, provided the atmosphere is humid and no drying of the leaf takes place, gives bright colours, but it may by reason of the plentiful air supply, push certain chemical changes to a conclusion before others have had time to develop sufficiently and the resulting tea may be soft.

Good results have been obtained by spreading thickly (to 4 inches) and turning the fermenting leaf each half hour. The best results have been obtained from leaf thinly spread in a cold, humid atmosphere.

The best colours are generally made in the morning when the temperature is low and the atmosphere humid. Poorer colours are made in the afternoon as the atmosphere gets dryer. In some factories all tea is manufactured at night for it is considered that the slacking off in efficiency which must arise with night work is more than compensated for by the lower temperatures and higher humidities pertaining at night.

The control of Fermentation.—If the temperature of the leaf is kept low and the atmosphere humid then the rate of oxidation going on during fermentation may be said to be proportional, within limits, to the air supply. This means that with the conditions regarding temperature and humidity ideal, a thin spread (good air supply) combined with a short fermentation should give the same results as a thicker spread with a longer fermentation.

This has been observed in the factory many times and the teas produced under the following conditions—

2½ inches spread	3¾ hours' fermentation.
3½ inches spread	4½ hours' fermentation.
5 inches spread	6 hours' fermentation.

were identical so far as the taster's report was concerned. No very definite figures can be given concerning the best fermentation conditions because so much depends on the degree of the wither. With a normal good wither, a cold rolling room (82°F.), and leaf in the fermenting room at 82° F., a fair average time of fermentation is 3½ hours if the leaf is spread at 2½ inches. At 73°F. it has been found that the time must be increased to 4½–4¾ hours and for intermediate temperatures the increase should be in proportion.

FIRING

From the chemical point of view firing merely means the cessation of chemical action in the leaf. The rate of fermentation increases with temperature so that unless the leaf meets a certain degree of heat on entering the dryer the fermentation is merely carried on at an increased rate and tea may be overfermented and lose briskness unless the necessary allowance is made in the time the leaf remains on the fermenting floor.

The temperature of the exhaust air of a pressure dryer, i.e., the air which meets the leaf when it first enters the dryer, should be about 120°F.

below the top tray. Theoretically the best temperature is 150°F. but with the ordinary dryer such an exhaust temperature would necessitate too high an initial temperature.

The first fire should be at least 12 annas otherwise the second fire must be carried out at a high temperature and the tea is liable to lose quality.

The firing temperature should be kept as low as 170°F. on forced draft machines. If the firing temperature is too low—below 140°F.—the tea will not keep, for the enzymes are not destroyed and fermentation continues. As the temperature of firing is increased so the tendency to produce poorer teas is increased. The higher the firing the less briskness and the less strength will be obtained in the final teas. High firing destroys the colour of tip.

In many factories firing is carried on at high temperature in order to cope with the leaf. In others it is often stated that a dryer will not function unless the initial temperature is at some figure far beyond the safety mark. In these latter cases the trouble generally lies with the fan which is too slow running. The capacity of a dryer is the product of the rate of air flow and the temperature of the air. It follows then that the capacity may be increased by speeding up the fan and leaving the temperature at its original figure. In several factories the fans are run at speeds somewhat in excess of the scheduled number of revolutions and good has always resulted from such increases.

A series of experiments were carried out on a Down Draft Dryer in order to investigate the temperature at which tea was high fired. This particular type of machine was used because of the ease of control but the temperatures apply to any form of dryer.

Thus—

Tea fired to 16 annas at 170°F.	—	not high fired
Tea fired to 16 annas at 170°F. then left at 170°F. for 15 mins.	—	not high fired
Tea fired to 16 annas at 210°F.	—	not high fired
Tea fired to 16 annas at 210°F. then left at 210°F. for 10 mins.	—	high fired
Tea fired to 16 annas at 240°F.	—	high fired
Tea fired at 170° and temp. raised to 240°F. by which time tea had dried to 14 annas	—	not high fired
Finished at 170°F.		

The conclusion is that tea cannot be high fired at 170°F. but that temperatures over 200°F. become dangerous if the tea remains for long at such temperatures. True, Empire machines with initial temperatures as high as 260°F. turn out tea which is not high fired but it must be remembered that the leaf on the bottom tray only is submitted to this temperature. Firing under such condition causes a loss of briskness and strength in the finished tea.

When leaf is fed into an empty dryer the first tea discharged is liable to be high fired, if the dryer is heated to much more than 200°F. In order to obviate this the side doors of the dryer should be left ajar till the first leaf is near the bottom trays.

Automatic temperature recorders are useful on drying machines. Although no very definite firing temperature can be given if tea is to be consistently turned out at 12 annas during the day a variation of 10°F.

should cope with any variation in the moisture content of the leaf during the day's manufacture.

'Gaping' of Tea.—Tea when it is packed should contain 5 to 6 per cent moisture. If it contains more it is liable to 'go off' before it gets Home and if less, post-fermentation is restricted and the tea will not mellow and it also loses pungency. When tea comes from the second dryer it contains 2-3 per cent moisture but during sorting more is picked up, for tea is very hygroscopic, and the moisture increases to 7 or 8 per cent. In cases where much picking over for stalk is done the moisture figure may rise to 10-11 per cent. In several cases where complaints have been received that the tea does not keep well, examination has shown the moisture content to be between 7 and 8 per cent.

It is very difficult to tell by feeling or smell whether tea contains the right amount of moisture for packing. Some factories have installed a chemical balance and a small steam oven and thus the moisture content of each bin is estimated before the tea is packed. The process of moisture determination is a simple one and the apparatus costs less than Rs. 200.

The unnecessary heating of tea causes loss in the quality of the liquor so that gaping should only be employed when it is necessary and even then it should be carried out at as low a temperature as possible. A temperature of 180°F. is sufficiently high.

SORTING

The sorting of tea is so largely dependent upon market conditions that it is not proposed to deal with it here. There is, however, one point to which attention might be called. The 'greying' of tea is brought about during sorting and cutting of the dry leaf and consists in polishing the surface of the tea. Any machine therefore that causes a rubbing of the surface of the leaf tends to produce greyness. Machines running at high speed by increasing the rubbing effect tend to increase the amount of greyness. In sorting therefore the type of machine used should be one that, so far as is practicable, does away with the rubbing of the leaf. The circular sifters running slowly consequently tend to grey the tea less than if they are speeded up but in any case they cause the rubbing action to take place. Other machines such as rotary sieves running at much higher speeds also give greyness to the tea. Machines which produce a hopping rather than sliding action on the sieves tend to grey the tea less. Machines depending on an air-blast such as the deflector type of machine are the least liable to grey the teas. One cause for the greying of tea is the speed at which the cutters or breakers are run. A fast run machine will tend to grey the teas much more than one run slower, and consequently such machines should be run at the slowest speed that is compatible with efficiency. One often sees such machines run at too high a speed in order to get through the amount of work whereas what is really required is another machine so that the two machines may both work at proper speeds.

During the sorting tip is very easily destroyed, consequently to obtain a tippy finished tea it is necessary that the fine mal should be subjected to the very least possible amount of sorting and cutting.

'I. T. A.'s Scientific Dept.'s Quarterly Journal.'

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

(a) *Some of the higher London Prices—*

†	2,361,516	..
---	----	----	-----------	----

(b) *Précis of Reports on the London Market received on Monday, November 1, and covering the seven days ending Tuesday, October 12 :—*

(1) *Tea*.—This Mail only brought us the Tea Brokers' Association's report on the auctions held during the week ending October 2nd, and not, as we had also expected, on those held during the week ending October 9th. We learn, however, from other sources that the South Indian average price for that week works out at 1/6·08*d.* which is over $\frac{3}{4}$ *d.* above the average recorded on Page 761. Apparently, however, only 740 packages of South Indian Tea were on offer, so that too much significance should not be read into the rise in the average price. Indeed the rise may have been chiefly, if not entirely, due to an absence of inferior qualities, and not to improved market conditions which circumstances scarcely seem to warrant. Bonded stocks in the United Kingdom on August 31st were 156,850,000 lbs. which is less than 9 million pounds below the very high figure for the same date in 1925 and over 30 million pounds above the figure on the 31st August, 1924. Imports from India and Java show increases while there is no corresponding augmentation of exports—Russia for instance having ceased to buy for some months—, and Home consumption is on the decrease.

(2) *Rubber*.—During the seven days under review, stocks increased by 1,161 tons to 36,065 tons; but the 'spot' price remained steady at about 21*d.* The exports from Malaya during September are reported to be the highest on record at 35,913 tons and, after the deduction of re-exports=13,972, give a nett figure of nearly 22,000 tons which represents practically 100% of Standard Production in full. However, the shipments do not necessarily give the key to the situation any more accurately than the London stocks. The significance of the one depends upon how much rubber has been kept back upon Estates; and the significance of the other upon the proportion of the bonded stocks which are merely awaiting delivery, having been already sold. The present London 'spot' price is, of course, equally inconclusive; very few transactions actually taking place thereat.

(3) *Coffee*.—On October 11th, the London stocks of African, Indian, and other kinds respectively were given in bags as 18,709; 9,491, and 69,831 as against 27,572, 31,114 and 107,978 on the corresponding date last year. No East Indians were on auction but they all realized very good prices on private sales.

II. Weekly Rainfall Statement

From Sunday, October 24, 1926 to Saturday, October 30, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	N.R.	67·31	N.R.	19. Naduvattam	...	92·61	92·61
2. Kalthuritty.	0·72	108·08	108·80	20. Coonoor ...	...	25·10	25·10
3. Tenmalai ...	1·03	106·51	107·54	21. Kotagiri ...	0·02	40·98	41·00
4. Mundakayam.	1·12	146·71	147·83	22. Ootacamund	...	40·02	40·02
5. Peermade ...	N.R.	175·28	N.R.	23. Yercaud ...	...	N.R.	N.R.
6. Twyford ...	N.R.	193·69	N.R.	24. Devala ...	...	145·77	145·77
7. V'periyar ...	0·96	76·98	77·94	25. Gudalur ...	...	77·92	77·92
8. Kalaar ...	...	194·74	194·74	26. CALICUT ...	0·05	121·06	121·11
9. Chittuvurrai	0·30	36·97	37·27	27. Kuttiyadi ...	...	160·22	160·22
10. BODI'KANUR	N.R.	17·52	N.R.	28. Vayittiri ...	...	184·50	184·50
11. COCHIN	3·77	111·68	115·45	29. Manantoddi.	...	104·80	104·80
12. Mooply Valley,	0·07	129·33	129·40	30. Billigiris ...	0·50	45·73	46·23
13. Pachaimalai.	0·92	120·12	121·04	31. Sidapur ...	0·85	73·06	73·91
14. Mudis ...	1·32	227·56	228·88	32. Pollibetta ...	...	96·92	96·92
15. Nell'pathy...	1·35	92·81	94·16	33. Somwarpett.	...	69·88	69·88
16. POLLACHIE.	...	27·25	27·25	34. Ballupete ...	...	65·40	65·40
17. Manjeri ...	0·08	130·74	130·82	35. MANGALORE	...	113·98	113·98
18. Nilambur ...	...	116·44	116·44	36. MADRAS ...	2·77	13·95	16·72

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Wednesday, November 3, 1926)

(A) EXCHANGE

The market during the last week has been steadier and rates have improved somewhat. Though there has been an improvement in business compared with recent weeks the volume of business for this time of the year is decidedly small. The Coal Strike at Home and the rise in freights consequent on the shortage of tonnage is still seriously affecting the situation, but it is hoped that an early settlement of the English Industrial situation will soon be concluded. The steadier tone during the week has been due to the expectation of an early settlement of the Strike and has resulted in more Bills offering. Throughout the week there have been rumours of expected Bullion in Bombay and we have heard that about £300,000 has been fixed for December in Bombay with buyers over at 1s. 5 15/16d., and while rates are unchanged for near positions, there is a slightly easier tendency for forward deliveries, particularly December. The tendency for the top of the market move forward continues. The best rates quoted to-day for T.T. on London are 1s. 5 27/32d. first half and 1s. 5 7/8d. second half November, 1s. 5 29/32d. first half and 1s. 5 15/16d. second half December, 1s. 5 31/32d. January, 1s. 6d. February/March, 1s. 5 31/32d. April, 1s. 5 15/16d. May, 1s. 5 29/32d. June/September. Three months approved credits 1s. 6 5/32d. this and next mail, 1s. 6 3/16d. balance November, 1s. 6 7/32d. first half and 1s. 6 1/4d. second half December, 1s. 6 9/32d. first half and 1s. 6 5/16d. second half January, 1s. 6 5/16d. first half and 1s. 6 11/32d. second half February, 1s. 6 11/32d. March, 1s. 6 5/16d. April.

(B) MONEY

There is practically no change. We quote Call money at 1 per cent, three months at 2 per cent, four months at 3 per cent, six months at 3½ per cent to 4 per cent and twelve months 4 per cent. The Imperial Bank rate is unchanged at 4 per cent and the percentage of cash to liabilities is 44·78. The Franc has steadily improved during the week and closes at 152·75 as compared with 159 1/8 a week ago, and the Dollar is quoted to-day at 4·84 9/16 as against 4·84 11/16 a week ago.

IV. Selected Madras Market Quotations

For the week ending Wednesday, November 3, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10¾
Bank of Mysore Rs. 100	160	...
Indian Banks (Rs. 100) Rs. 50	65	66
Indian Banks (Rs. 100) Rs. 10	13	13½
Central Bank (Rs. 50) Rs. 25	28	29¾
Imperial Bank of India (Rs. 500)	1460	1465
" " (Rs. 125)	360	365
Chartered Bank £5	£ 19-15-0	£ 20-15-0
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 30-5-0	£ 31-5-0
" " (£25-B) £12½	£ 30-5-0	£ 31-5-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 46-12-6	£ 48-2-6
P. and O. Bank £10	£ 10-1-3	£ 10-11-3
MILLS		
Bangalore W. C. and S. Ordry. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	92	...
Buckingham and Carnatic Ordry. Rs. 100	...	200
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	122½	124
Coimbatore Rs. 100	...	160 x.D.
Coimbatore Mills Rs. 85	...	85
Gokaks Rs. 100	105	110
Maduras Rs. 100	410	...
INDUSTRIALS		
Deccan Sugar Ordry. Rs. 500	875	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100	106	110
E. I. Distilleries and Sugar Factories Ordry. £0-16-0	15s.	17s.
E.I D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	63	65
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-10-0	3-14-0
Singareni Collieries, Rs. 10	9½	10¼
W. E. Smith Ordry. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	90
Spencers Ordry. Rs. 100	150	155
Spencers 6 per cent. Prefs. Rs. 100	97	99
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	116
Tata Iron and Steel Ordry. Rs. 75	62	60
" " 7½ per cent. 2nd Prefs. (Rs. 100)	73	77
United Breweries Ordry. Rs. 75	132½	135
United Breweries 6 per cent. Prefs. Rs. 100	90	95
PLANTING		
Cochins Rs. 15	55	60
Eddivannas Rs. 15	28½ x.D.	29½ x.D.
Kalajas (Rs. 15) Rs. 7	6½	7½
Kinalurs Rs. 10	31	34
Kuttiadis Rs. 15	19	20
Malankaras Rs. 30	116 c.D.	117 c.D.
Peermades Ordry. Rs. 10	28 x.D.	29 x.D.
Peria Karamalais Rs. 15	50	51
Periasholas Rs. 10	7	7½
Periyars Rs. 10	21	23
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	4½
Thodapuzhas Rs. 10	32½	34
Thirumbadis Rs. 10	22	23
Tropical Plantations Rs. 22½	22½ c.D.	...
United Nilgiris Rs. 100	115	120
Vellamalais (Rs. 15) Rs. 13	16 c R.	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 46] SAT., NOVEMBER 13, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	765	Letter to the Editor—	
Personalia ...	767	The U.P.A.S.C. Meet ...	775
Over the Fence ...	768	A Rubber Survey ...	775
Shevaroy P. A. Meeting ...	770	Commercial and Meteorological.	777
Dream that Came True ...	774		

EDITORIAL NOTES

The Director of the Labour Department asks us to state that Superintendents should, when sending in the forms referred to in the Census Notice which we published on page 712 of our issue of October 23rd, exclude from their figures NON-WORKING small children and 'Dependents' of coolies living on their Estates; but include all ordinarily working coolies who—though still living on an Estate in the Hospital or in the Lines—are, owing to sickness or from some other reason, TEMPORARILY absenting themselves from work.

The figures published by the Secretary of the U.P.A.S.I. on page 751 of our last issue showed that the Subscriptions to the Benevolent Fund for the financial year to date were almost Rs. 2,000 less than the receipts during the corresponding period of 1925. We are delighted to be able to report that no less than 25 per cent of that deficit has now been wiped out by a very generous donation from Mr. H. Perceval Hodgson who, as Planting Member from 1896 to 1900 and again from 1904 to 1908 and as Chairman in 1900–01, is well known to our Readers, if not personally, at least by repute. In forwarding his donation, Mr. Hodgson writes as follows to the Secretary; and we are glad to place his words on record in this Paper in the hope that other old friends of the South Indian Planting Industry may be inspired to follow his most commendable lead:—

'I have just read in the issue of *The Planters' Chronicle* of September 11 the Proceedings of the Third Annual General Meeting of the S. India Planters' Benevolent Fund; and, tho' (alas) I can no longer claim to be a Southern India Planter, I hope my past connection with the Planters of South India will justify my wish to help in the work of this Fund the utility of which I can easily imagine, and I have much pleasure in enclosing a cheque for Rs. 500 as a donation to the Fund.'

Our Readers will remember that, by Resolution No. 47 at the last Annual General Meeting, it was decided that the Sidapur Coffee Station should be kept open until the future policy of the Mysore Administration had been ascertained; and in this connection the General Scientific Officer now informs us that Mr. P. G. Tipping has kindly consented to abide by the same terms as before, under which he charges the cost of all works carried out at the Station to the Scientific Department, and credits that Department with one rupee per bushel for the crop produced.

We give on Page 775 the first instalment of an interesting and exhaustive resumé of the present rubber position from an American point of view, with special reference to Mr. David M. Figart's *The Plantation Rubber Industry in the Middle East*, and to the recent enquiry by the House Committee on Interstate and Foreign Commerce into Foreign Control of Raw Materials.

The publication of the 1926-27 edition of THE PLANTING DIRECTORY OF SOUTHERN INDIA has been unavoidably delayed owing to the fact that it has been found necessary this year to incorporate in the text pages an unprecedentedly large number of changes in both acreages and personnel. It is confidentially hoped, however, that Subscribers to the new edition will not be unwilling to wait a little longer for the receipt of the Volume; seeing that the incorporation of the changes referred to above should make it, when it does appear, as comprehensive as possible a Book of Reference for Planters during the coming year. The final proofs are now being dealt with as rapidly as possible in the Secretary's Office, and it is hoped that the Book will be ready for despatch to subscribers within the next few weeks. At the moment of writing the advertisement pages are being printed off in order that the Blocks may be returned to their owners at the earliest possible date.

We would remind our Readers that the Postal Authorities will not forward re-addressed CHRONICLES, to places outside India, as the concession postage rate of three pies for a registered periodical is only applicable to India itself. Such re-addressed covers, therefore, do not reach their destination and are merely eventually returned to us *via* the D.L.O. We notice of late that some of the covers returned in such circumstances bear re-addresses like 'C/o. Post Master, Penang'; and it would conduce greatly to the accuracy of the records in both the U.P.A.S.I. and *The Planters' Chronicle* Offices if the writers of such endorsements would, in cases where the addresses is only on leave, retain THE CHRONICLES for him until he returns to the Estate; and, in cases where the addressee has left India for good, advise us definitely to that effect so that the name may be deleted altogether from the Publisher's Address List.

If no modifications are made in the present mode of assessment, it is estimated that during the fifth Restriction Year which began on the 1st inst. the increases in Standard Production on account of trees either coming into bearing or attaining greater maturity will be from 301,000 tons to 325,000 tons in the case of Malaya and from 70,476 tons to 72,000 tons in the case of Ceylon.

PERSONALIA

DEATH

BLACK.—In England on the 2nd instant; Mr. W. M. Black, Late Senior Partner of Messrs. Aspinwall & Co., Ltd., Cochin.

ARRIVALS

MR. V. L. TRAVERS DRAPES, after an enjoyable trip to England, has returned to Waterford Estate, Yercaud.

MR. H. L. CUTHELL of Tatamala Estate, Manantoddy, returned from furlough by the S. S. *Yorkshire* which arrived at Colombo on Monday last.

MR. ROBIN LESCHER, O. B. E., returned to Madras from Home last Thursday morning; and left for Pullengode, Malabar, the same night.

MR. H. R. HOWSON, who is coming out as Assistant to MR. LESCHER, is due by the S. S. *City of Venice* to-day.

MR. J. STANES and MR. NORMAN STANES are due to leave Marseilles on the 27th instant by the S. S. *Herefordshire* and expect to arrive at Coonoor about the 20th of next month.

ON THE SICK LIST

MRS. WADDINGTON, who is advancing steadily along the road to convalescence, has now left the Lady Willingdon Nursing Home and returned to 'Binfield', Poonamallee Road.

OTHER PLANTING NEWS

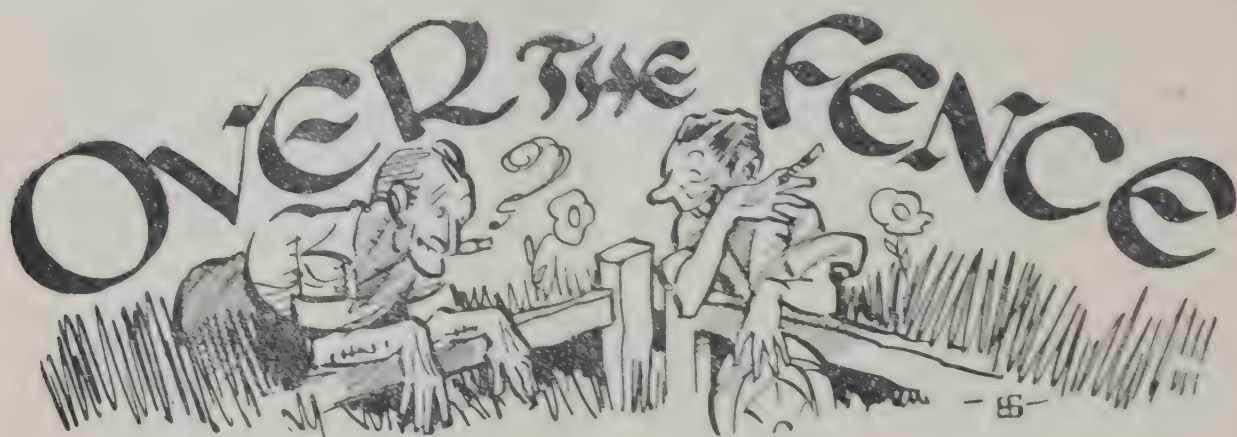
MR. J. A. RICHARDSON of the Estates Agency Department of the Madura Co., Ltd., Cochin, was in Madras on business on Friday and Saturday last.

MR., MRS. and MISS JOHN of Munnar; MR. H. L. PINCHES and MR. R. BROWN of the Kanan Devan Hill Produce Company, Ltd.; and MR. and MRS. J. HATTON ROBINSON of Valparai Group, Anamalais, were amongst the visitors to Madras this week.

We note that Mr. ERIC MILLAR, presiding at the recent Annual General Meeting of Messrs. Harrisons and Crosfield, Ltd., made the following remark in the course of his speech:—

'MR. MACKIE of Quilon and MR. HORNER of Colombo have recently retired from the management of our Branches there; but fortunately we are retaining their services under suitable appointments in the Head Office.'

MR. R. D. ANSTEAD's lecture on 'Planters' Crops. Their distribution and management' will be delivered at The Museum Theatre on Monday, the 22nd instant, at 6 p.m. with the Marquis of Linlithgow in the Chair.

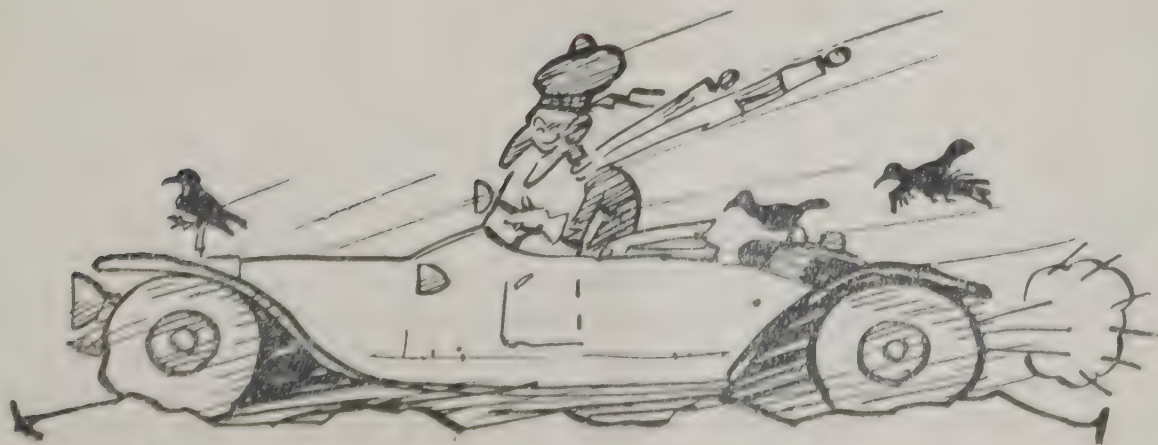


Ramaswamy Naidu, don't be such a fool ;
 You know you're late for muster,
 And that's against the rule ! '
 'Ai-yi-yo Sāār, I cannot make to lie ;
 My family she got stomach pain
 And cousin-brother die ! '





Sing a song of saxpence ! A Planter has retired :
Gone to live in Aberdeen, the place where he was sired :
When he gets to Glasgow, how happy he will be
For he'll get YIN and saxpence now for One Rupee.



SHEVAROY PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of an Extraordinary General Meeting held at the Victoria Rooms,
Yercaud, on Thursday, October 28, at 2 p.m.

Members Present

Capt. E. H. A. Travers Drapes (*Chairman*), Mrs. V. A. Lechler, Mrs. M. S. R. Short, Mrs. Cayley, Rev. Fathers Capelle and Faisandier, Messrs. S. Campbell, E. H. Gilbey, P. J. Watts, E. L. Poyser, L. E. T. Short, C. Rahm, N. M. Hight, C. L. Hight, J. Prioris, and W. A. Rahm (*Honorary Secretary*).

AGENDA

1. *Notice calling the Meeting.*—The notice calling the Meeting was read.

New Member of the Association.—The Chairman announced the entry of Manesty Hill Estate, fifty-two acres, as a Member of the Association.

2. *Confirmation of Proceedings.*—Read and confirmed Proceedings of the E. G. M., dated August 12, and a special meeting of the Forest Lease Holders dated October 7, 1926.

3. *Delegates' Report of the 33rd Annual General Meeting of the U. P. A. S. I.*—Capt. E. H. A. Travers Drapes read the following Report :—

Report of the Shevaroy Delegate to the U.P.A.S.I. Annual General Meeting at Bangalore

I attended the 33rd Annual General Meeting of the U.P.A.S.I. held at Bangalore on the 23rd, 24th, 25th and 26th August last as your Delegate.

Mr. P. J. Watts also attended as one of your Delegates on the opening, but found it inconvenient to be present after that.

Road Fund.—A Sub-Committee was appointed to go into this question, and submitted to the meeting a very practical Report ; as a result of which a resolution was passed recommending to the Government of India through the Government of Madras, the establishing of a Road Fund in India on the lines of the Road Fund now in force in Great Britain (p. 97). It was also resolved that if necessary the U.P.A.S.I. shall make a contribution towards the cost of engaging a special Investigator on this subject (P. 99).

Labour Conditions.—The Meeting considered what steps should be taken controvert the unsubstantiated statements regarding conditions of Estates, which have recently been given prominence to in certain sections of the daily Press ; and after a good deal of discussion in Committee it was resolved to invite the Commissioner of Labour to enquire into the conditions of Labour on Tea, Coffee and Rubber Estates. (pp. 58-59).

Mysore Coffee Experimental Station and Scientific Department.—Mr. C. H. Krumbiegel, the Acting Director of Agriculture, Mysore, has been in charge of the Station in Mysore for the past year during the absence of Dr. Leslie Coleman, on leave. I will not take up your time by going through the very interesting Report the former Gentleman favoured us with as no doubt most of you have read it in the newspapers ; but for the benefit of those who may have missed it I may mention a few important points. Eighteen acres of land have been cleared, and a good deal of work has been done,

It is very interesting to learn that a portion of the farm is to be set apart for grafting experiments. A cardamom plot has also been arranged for. It is considered likely that the Mysore Government will sanction the purchase of expensive apparatus for the investigation of constitutional diseases which interfere with the nutritive functions of plants and cause a predisposition to disease: which knowledge, as Mr. Krumbiegel pointed out, will save a lot of time and money now spent on preventive measures. Our thanks are due to Mr. Carpenter, the Chief Scientific Officer of the Indian Tea Association, for his valuable suggestions as to how our Scientific Department should be organized. He has laid stress on the need for three separate Departments for Tea, Coffee and Rubber. I would like to draw the attention of those who expect early results from Scientific Experiments and investigation to what Mr. Carpenter has said on this point regarding Tea; as no doubt it applies in some measure to Coffee also. He says, 'From the moment of planting it you cannot expect to obtain results of very great value under about ten years.' You will all, I am sure, regret to hear that Dr. Leslie Coleman is not returning to India; and realize the serious setback this has given to our schemes for the organization of a separate Coffee Scientific Department. In this latter connection two Resolutions were passed, one 'That no action be taken in the matter of Scientific aid for Coffee until the proposals of the Upasi to have a fully qualified Resident Manager on the Station have been put before the Mysore Durbar, and its policy for the future management and working of the Mysore Coffee Experimental Station has been ascertained' and the other 'That the Secretary be instructed to put before the Mysore Durbar the Upasi's views regarding the control and management of the Coffee Experimental Station; and that, until something definite has been arranged, the services of Mr. Munro be retained and the Sidapur Station be maintained under his control (pp. 60, 88, 101). I think we may with confidence depend upon the Mysore Durbar meeting our views as the Deputation which waited upon the Dewan met with a very sympathetic hearing; and we may expect the Mysore Government to favourably consider the question of the appointment of a qualified resident European Scientist for the Experimental Station on the understanding that the Association pay an increased contribution if necessary towards this object. I think I am right in saying that if our views are met, every District Association interested in Coffee will agree to increase their Scientific Cess. In the meantime we should consider ourselves fortunate in being able to retain the services of Mr. Munro.

Labour Laws.—(at this stage the meeting went into Committee).

Reduction of Advances.—I had the pleasure of supporting and seconding the following Resolution proposed by Coorg, which was carried 'That this meeting consider the advisability and practicability of combination of Members of the Association for the systematic reduction of advances to labour, and that the matter be referred to all District Associations for opinion.' You will all by this time have realized the great importance of this subject; and I think our little Association may feel proud in having led the way in showing what can be accomplished by combination. Now that our Rules for the Limitation of advances have been working for nearly nine months; we can see more clearly what competition in high advances was leading us to and it looks as if my last year's dream of a combination of all planters in South India is approaching reality (p. 70).

Sports Club.—As desired I brought to the notice of the Committee the fact that the present subscription is the same for the Proprietor of 50 acres as for a man drawing a salary of Rs. 1,000 a month; and suggested that an alteration might be considered (p. 74).

Political Representation.—The Resolution brought forward by the Mundakayam Association that the U.P.A.S.I. do withdraw from the arrangement made in 1924 for a salaried Political Representative was withdrawn, after Mr. Congreve's very able speech on the subject, which I will read to you (p. 76).

Pilferage of Estate Produce.—I did not speak on this subject as it was connected only with the robbery of goods consigned through cartmen to estates, and did not concern thefts on estates which is a matter for reference to the local Superintendent of Police (p. 79).

Coffee—General.—A Resolution was passed that the U.P.A.S.I. do address the Government of India through the Government of Madras urging that the import into India of Coffee, except in the form of roasted and ground, be prohibited with as little delay as possible. As you may know this prohibition already has the sympathy of the Government of Madras.

Budget and Finance.—A further sum of Rs. 20,000 has been transferred to the Reserve Fund.

Chairman.—Mr. R. Fowke was unanimously re-elected.

General Committee.—I attended two meetings of this Committee while at Bangalore.

Affiliated Associations.—A special request was made by the Chairman that replies from District Associations be sent punctually to all references.

And now Ladies and Gentlemen, I think I have dealt with all that has been of interest to us at the last meeting of the Upasi but I shall be glad to answer any questions you may wish to put, to the best of my ability. In conclusion I would thank you once more for the honour you have conferred upon me by sending me as your Delegate.

(Signed) E. H. A. TRAVERS DRAPES,

CAPT.,

Shevaroy Delegate to Bangalore.

Proposed by Mr. E. L. Poyser and seconded by Mr. P. J. Watts, that 'Capt. E. H. Travers Drape's Report on his attendance as Delegate to the Annual General Meeting of the Upasi be adopted, and that part of his Report delivered in open meeting be published with the Minutes of this meeting in the *Planters' Chronicle*. Also that a vote of thanks be accorded to Capt. E. H. A. Travers Drapes for attending the meeting on behalf of the S. P. A. and for his interesting Report thereon.'

Carried Unanimously

4. *Delegates' Expenses.*—Proposed by Mr. N. M. Hight and seconded by Mr. C. Rahm that 'The sum of Rs. 200 be sanctioned towards Capt. E. H. A. Travers Drape's expenses as Delegate to the 33rd Annual General Meeting of the U. P. A. S. I.'

Carried Unanimously

5. *Reduction of Advances.*—Read letter dated August 27, from the Secretary, U.P.A.S.I. re the Resolution passed at the A. G. M. of the Upasi regarding the systematic reduction of advances. Resolved that 'This Association having already a working scheme for the limitation of advances,

a copy of the Rules relating to the same be forwarded to the Secretary, U.P.A.S.I. for information, and as conditions in other districts are necessarily not the same as on the Shevaroy's, this Association refrains from making any suggestion, but is strongly in favour of a combination of all Associations towards the systematic reduction of advances.'

Carried Unanimously.

6. *South Indian Railway Out Agency.*—Mrs. V. A. Lechler brought forward a scheme for an Out Agency of the South Indian Railway at Yercaud for parcels and goods as suggested by Mr. Harrison. Mr. E. L. Poyser explained the position as regards the Out Agency at Chickmagalur and pointed out the difficulty of transporting goods such as bulky manures from the Out Agency to outlying Estates. The Honorary Secretary was instructed to write to Mr. Harrison for his views on the subject.

7. *Supplemental Subjects.*—With the consent of the meeting the following supplemental subjects were considered :—

Holder Sprayers.—Orders for a further 23 Sprayers and a supply of spare parts were handed in.

Verification of 'A' Forms.—Copies of 'A' Form, estimates of crop, were distributed among interested members for purpose of verification and return to the Honorary Secretary.

Yercaud Sub-Treasury.—The Chairman brought up the question of the lack of cash in the Sub-Treasury at Yercaud and the following Resolution was passed :—

Resolved that 'the attention of the T. D. C., Salem, be drawn to the fact that there is very often an insufficient quantity of coin in the Sub-Treasury at Yercaud to meet the requirements of members of this Association, on which occasions Currency Notes are given in exchange for Supply Bills; and that he also be requested to maintain a small supply of coppers which are seldom available at the above Treasury.'

Carried Unanimously.

Yercaud Post Office.—The Chairman drew the attention of the Meeting to the overgrown condition of the Old Post Office compound and the following Resolution was passed. Resolved that 'The Superintendent Posts and Telegraphs, be addressed with a view to maintaining the compound of the Old Post Office buildings in a cleaner and more sanitary condition than it is at present, as it is an eyesore in its present condition, in the middle of Yercaud.'

Carried Unanimously.

Correspondence.—Read and recorded letter dated October 23, from Secretary, U.P.A.S.I., re 'Conditions on Estates.'

Read letter dated August 3, from Colonel Walsh re the A. I. R. O.

Read Notice from the Collector of Salem re the renewal of Gun Licences.

Read letter dated October 14, from the Officer in charge, No. III Survey Party, re cost of boundary surveys.

With a vote of thanks to the Chair the meeting terminated.

W. A. RAHM,

Honorary Secretary.

E. H. A. TRAVERS DRAPES,

CAPT.,
Chairman.

DREAM THAT CAME TRUE

Rubber Magnate's Romance

SIR HENRY WICKHAM, the pioneer of the Malay rubber industry, who at the age of 80 is to receive from the Malayan Government a grant of £8,000 for his work, has related his life romance to *The Evening Standard*.

He tells how, without a penny in his pocket, he chartered an ocean liner which had been abandoned on the Amazon, and brought home to England the first rubber seeds from Brazil which led to the foundation of the Malay rubber industry.

It was in 1878 that Mr. Henry Alexander Wickham brought the seeds home, but his working acquaintance with the tropical rubber trees of South America began in the sixties.

'The idea of cultivating the wild forest trees was looked on at that time as a dream,' Sir Henry said, 'and I was as one crying in the wilderness, but eventually Sir Joseph Hooker, of Kew Gardens, and Sir Clements Markham, then of the India Office, took an interest in it, and subsequently a commission was appointed by the Government of India for the introduction of the tree which produced the pure Para rubber of commerce.'

A DESPERATE GAMBLE

'I was left unhampered by instructions as to ways and means. It was a straight offer, pay to follow results. With that opportunity the question came: "How on earth can I bring it off?" Kew had been trying to get the seed in all sort of ways, but without success.'

'I carried on my work in Brazil and was beginning to despair when the European settlers were startled by the news that a fully equipped ocean liner had arrived in the river. It was the first vessel to inaugurate a new line between Liverpool and the Amazon.'

'It occurred to me that with the arrival of this ship the thing was done, but later, after she had proceeded to the upper reaches of the river, we heard that the vessel had been abandoned and left on the captain's hands after having been stripped by the skeleton crew.'

'She had not a stick of cargo to take back to Liverpool. This was my chance. I had no cash. The seed was beginning to ripen in the trees in the high forests. I knew the skipper must be in a fix, so I wrote to him, boldly chartering the ship on behalf of the Government of India.'

'Then, getting an Indian canoe, I went up the broad river—rather ticklish work in so small a craft—and struck out for the deep woods, where I knew were to be found the full-grown rubber trees.'

MEN CARRIERS

'Working with as many Indians as I could get together at short notice, I ranged the forests and we packed as heavy loads of seeds as we could march under. I got the village maidens to make open work baskets or crates of split cane for carrying the seeds.'

In order to obtain clearance at the Port of Para, Sir Henry and the skipper had to explain to a local official that they were bringing home delicate botanical plants for His Majesty's gardens at Kew.

'Most of the seeds came over safely, and orchid houses and propagating sheds at Kew were cleared to make room for them, and a fortnight later the greenhouses at Kew afforded the spectacle of thousands of young rubber plants shooting up vigorously,' concluded Sir Henry Wickham.

Later the plants were safely introduced to Ceylon, Burma and the Malay States, and an industry was founded which at the present time represents a capital of over £100,000,000.

'The Pioneer.'

LETTER TO THE EDITOR

(*The Planters' Chronicle is not responsible for its Correspondents' views.*)

THE U. P. A. S. C. Annual 'Meet'

THE EDITOR,

'THE PLANTERS' CHRONICLE',
MADRAS.

SIR,

On my return from Home, I read the following on Page 72 of *The Book of Proceedings*:—

'Mr. Hawkins.—Mr. Newcome who was representing Coffee last year said that February was the most suitable month for Coffee (Laughter).'

Mr. Hawkins should verify his references.

The Sports Club has done much for South Indian Planters and for sport generally. But it has so far utterly failed to make it feasible for Coffee Planters to take part or to join in any large numbers. The few that have done so have acted mainly from altruistic motives. It was from those motives that I accepted February last year as slightly the best of the two bad and almost impossible months of February or March.

SOMWARPETT,
November 4, 1926,

Yours, etc.,
L. NEWCOME.

A RUBBER SURVEY

BY

GEORGE O. MAY

The recent inquiry by the House Committee on Interstate and Foreign Commerce into foreign control of raw materials raised a number of interesting issues. It inevitably brought up the question whether a country which was enforcing a highly protective flexible tariff could with any grace criticize control of raw materials by countries whose prosperity was dependent on exports of raw materials rather than on manufacture; equally inevitably the committee divided on this point on strictly party lines.

It raised such questions as whether control of production or export might in any circumstances be economically wise, and, if so, whether it was wise in the cases presented to the committee; what the effect of restriction on supplies and prices had been in the past and might be expected to be in the future; and what could be done to avoid or minimize injurious effects of such restriction.

Finally, it brought out clearly the fact that, in the absence of any material change in conditions, the time when the demand for rubber would exceed the supply could not be far distant.

Because of these facts, and because they make probable a renewal of controversy, it has seemed worth while to examine the record of the committee's hearings and its report with some care. Freedom of raw materials from governmental control is an attractive platform, but doubts may well be entertained whether the recent inquiry was calculated to further its adoption.

I

In presenting the subject to the committee the Secretary of Commerce mentioned a number of commodities in connection with which he suggested that objectionable methods of control had been, or were being, employed.

The committee, endorsing the complaints of the Secretary, found as a fact that control of either production or export had been instituted over

rubber, coffee, nitrates, iodine, potash, Egyptian long-staple cotton, sisal, camphor, and 'at times' Japanese silk. It described these controls as having certain common characteristics, such as that they were confined to commodities the consumption of which was mainly outside the countries imposing the control, and that all of them had brought about prices highly profitable to producers and some of them had advanced prices to exorbitant levels.

An examination of the published reports of the hearings shows that **these conclusions are in some cases quite unsupported, or even contradicted** by the testimony presented on behalf of the Department of Commerce. For instance, in the case of nitrates the evidence negatives any suggestion of restricted output or unreasonable profits. The only apparent cause of complaint is the Chilean export tax, but both this and the current prices of the product are stated to be substantially the same as before the war. In any case, the whole burden of the export tax that falls on the United States is given as only \$11,000,000 a year.

In the case of Egyptian long-staple cotton, the testimony was somewhat incoherent and quite unconvincing, the only point clearly brought out being that the United States took a relatively unimportant part—10 to 15 per cent.—of the production. It is difficult to see on what basis the committee reached its conclusions, and it was doubtless wise in refraining from any detailed discussion of the subject.

In the case of Japanese silk, the only evidence of control given by the departmental witness, or mentioned by the committee, was that on a single occasion in 1920, when the price of silk broke sensationally from eighteen dollars to six dollars, the Japanese Government made substantial advances to a silk corporation to avoid a complete demoralization of the market.

Rubber was, however, the main subject of inquiry; it is upon the validity of the Secretary's charges and the committee's conclusions regarding rubber (the committee accepted so completely the rôle of an echo that it is unnecessary to distinguish between the two) that judgment on the inquiry must turn.

Upon the subject of rubber, the oral testimony given to the committee was perhaps less important than the documentary evidence; in particular, a report by the Department of Commerce in April, 1925, on *Plantation Rubber in the East Indies* would appear to be of exceptional value. It bears evidence of careful and apparently impartial investigation by the representatives of the department; it is of recent date and yet, being published before the late rapid rise in prices, was not influenced by the controversies which that rise occasioned. While this report was referred to and quoted to the committee by the Secretary, it may be questioned whether it was studied with the care which it deserved. One cannot but feel that, had the information which it contains been more carefully examined, many of the **conclusions of the committee would have been substantially modified.**

The East Indian plantations on which the world now depends for its supply of rubber are a development of the last twenty years. It was in 1908 that the planted acreage for the first time passed the half-million mark; the first million mark was passed in 1910; the second in 1913, the third in 1917, and the fourth in 1920. Since 1920 the increase has been only about 8 per cent., or less than 2 per cent. per annum, and the acreage at the end of 1925 is estimated at 4,396,000 acres.

'The Atlantic Monthly',

(To be concluded next week.)

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea											
Mark	Pkgs.	Price	District	Week ending Oct. 9, 1926		January 1 to Oct. 9, 1926		January 1 to Oct. 9, 1925						
(A) TEA (WEEK ENDING OCTOBER 9, 1926)				s.	d.	s.	d.	s.	d.					
			N. India.	1	7·87	1	8·24	1	5·00					
			S. India	**1	6·08	††1	7·70	††1	5·24					
			Ceylon...	1	8·05	1	8·44	1	7·57					
			Java ...	1	3·04	1	4·32	1	0·66					
			Sumatra.	1	3·06	1	4·95	1	4·17					
			Nyassa-land.	1	2·27	1	5·42	1	1·02					
			Total ...	*1	7·57	†1	7·79	†1	5·47					
	(a) Anamalais—													
			s.	d.										
Thayamudi ...	284	1	6½	(B) COFFEE										
Nullamudi ...	151	1	6¼											
Thonimudi ...	234	1	5¾											
Kallyar ...	164	1	5¼											
Sholayar ...	167	1	4¾											
(b) Central Travancore														
Glenmary ...	118	1	5½	SPECIAL CABLE, LONDON, NOVEMBER 10, 1926 'A' QUALITY 160s. MARKET NOMINAL										
Thungamullay ...	110	1	5¼											
Injimullay ...	92	1	4½											
(c) Kanan Devans—														
Yellapatty ...	23	1	8¾							(C) RUBBER				
Letchmi ...	197	1	6½											
Sevenmallay ...	122	1	6½											
Guderal ...	38	1	6½											
Periavurrai ...	238	1	6¼											
Munaar ...	154	1	6¼	The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, November 9, 1926, was 20¾d.										
Nullatanni ...	115	1	6¼											
Kalaar ...	112	1	6¼											
Sothuparai ...	151	1	6											
(d) Niligiris—														
Nonsuch ...	76	1	10½											

(B) COFFEE

SPECIAL CABLE, LONDON, NOVEMBER 10, 1926
 'A' QUALITY 160s. MARKET NOMINAL

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, November 9, 1926, was 20¾d.

** Based on 2,546 packages.

†† " " 137,920 "

†† " " 147,848 "

* Based on 90,513 packages.

† " " 2,581,590 "

† " " 2,443,523 "

(b) *Précis of Reports on the London Market received on Monday, November 8, and covering the seven days ending Tuesday, October 19 :—*

(1) *Tea.*—The London Tea Brokers' Association's report on the prices realized at the auctions continues to reach us a week late, and consequently we are unable to give on the previous page any details regarding the period which is here under review. From other reports, however, we learn that the Southern Indian average for the week ending October 16, was 1/6·18d. or ·1d. above that shown on the previous page as having obtained during the previous week. The market was steady to firm; and any slight change in values was in favour of sellers, especially those with holdings of high grown Travancores. The Indian Tea Association estimates the crop to the end of September 1926 at 262 million pounds as against 246½ million pounds and 231 million pounds respectively for the corresponding periods of 1925 and 1924. The same Association reports that the total exports from Northern India to all ports from April 1st to September 30th inclusive amount to 150,792,147 lbs. as compared with 148,312,369 lbs. during the corresponding period of the previous year.

(2) *Rubber.*—During the seven days under review, the London stocks increased to 39,650 tons; but the 'spot' price remained fairly steady at 20¾d. to 21d. We notice that Mr. Eric Millar, presiding during the Mail week at the Annual General Meeting of Messrs. Harrisons and Crosfield, estimated that the total exports of rubber from all sources during 1926 would be 600,000 tons at the minimum and that actual absorption in the United States and other countries respectively would be 375,000 tons and 186,000 tons making a total of 561,000 tons in all. He feels confident, however, that the year 1927 will see a good deal, if not all, of this leeway made up; and it is not likely that next year's crop will exceed 635,000 tons, while absorption is likely to be well over 600,000 tons.

(3) *Coffee.*—No East Indians were on auction; but the nominal quotation during the seven days under review was quoted at 160s. to 180s. per cwt. indicating an improvement in the private demand. On October 18th, the London stocks of African, Indian, and other kinds respectively were given in bags as 20,434, 9,059 and 67,124 as against 27,325, 29,906 and 104,613 on the corresponding date last year.

(4) *Pepper.*—During the period under report Pepper was slightly firmer and Telli-cherry was quoted at 11d.

II. Weekly Rainfall Statement

From Sunday, October 31, 1926 to Saturday, November 6, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total
1. Thuckalai...	N.R.	67·48	N.R.	19. Naduvattam	1·61	92·61	94·22
2. Kalthuritty.	3·31	108·80	112·11	20. Coonoor ...	3·84	25·10	28·94
3. Tenmalai ...	3·55	107·54	111·09	21. Kotagiri ...	4·20	41·00	45·20
4. Mundakayam.	2·38	147·83	150·21	22. Ootacamund	1·61	40·02	41·63
5. Peermade ...	N.R.	175·52	N.R.	23. Yercaud ...	3·08	N.R.	N.R.
6. Twyford ...	2·98	194·29	197·27	24. Devala ...	N.R.	145·77	N.R.
7. V'periyar ...	1·64	77·94	79·58	25. Gudalur ...	0·91	77·92	78·83
8. Kalaar ...	0·70	194·74	195·44	26. CALICUT ...	1·49	121·11	122·60
9. Chittuvurrai	1·07	37·27	38·34	27. Kuttiyadi ...	2·93	160·22	163·15
10. BODI'KANUR	5·00	17·52	22·52	28. Vayittiri ...	0·37	184·50	184·87
11. COCHIN	2·89	115·45	118·34	29. Manantoddi.	0·40	104·80	105·20
12. Mooply Valley,	0·17	129·40	129·57	30. Billigiris ...	2·72	46·23	48·95
13. Pachaimalai.	1·91	121·04	122·95	31. Sidapur ...	0·53	73·91	74·44
14. Mudis ...	2·37	228·88	231·25	32. Pollibetta ...	N.R.	96·92	N.R.
15. Nell'pathy...	4·85	94·16	99·01	33. Somwarpett.	0·68	69·88	70·56
16. POLLACHIE.	2·97	27·25	30·22	34. Ballupete ...	00·7	65·40	65·47
17. Manjeri ...	4·59	130·82	135·41	35. MANGALORE	00·4	113·98	114·02
18. Nilambur ...	1·50	116·44	117·94	36. MADRAS ...	10·54	16·72	27·26

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, November 11, 1926)

(A) EXCHANGE

During the past week the market has been distinctly dull ; and very little business has been put through in spite of more attractive near and forward bill rates, though a few bills are appearing to-day. The general dullness has been accentuated by the fact that we were closed one day, while Bombay and Calcutta were shut three and two respectively.

The best rates to-day for T.T. on London are 1s. 5 13/16d. November ; 1s. 5 27/32d. first half and 1s. 5 7/8d. second half December ; 1s. 5 29/32d. January ; 1s. 5 15/16d. February/March ; 1s. 5 29/32d. April ; and 1s. 5 7/8d. May to September. There are buyers of three months credits at 1s. 6 1/8d. this month ; 1s. 6 5/32d. first half and 1s. 6 3/16d. second half December ; 1s. 6 7/32d. first half January ; and 1s. 6 1/4d. on to end March. This shows a distinctly easier tendency.

(B) MONEY

There is no enquiry for money, and rates are nominal. Call is quoting at 1 per cent ; three months at 2 per cent, four months at 2½ per cent, six months at 3 per cent, and twelve months at 4 per cent. The Imperial Bank rate is unchanged, and the percentage of cash to liabilities is down to 42·75 against 45·58 a week ago. The Franc shows a distinct improvement, and at present stands at 150·00 as compared with 152·75 last week, The Dollar is 4·84 11/16 against 4·84 9/16 a week ago.

IV. Selected Madras Market Quotations

For the week ending Wednesday, November 10, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10¾
Bank of Mysore Rs. 100	160	...
Indian Banks (Rs. 100) Rs. 50	65	66
Indian Banks (Rs. 100) Rs. 10	13¼	13½
Central Bank (Rs. 50) Rs. 25	28	28¾
Imperial Bank of India (Rs. 500)	1490	1510
" " (Rs. 125)	360	380
Chartered Bank £5	£ 19-15-0	£ 20-15-0
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 30	£ 31
" " (£25-B) £12½	£ 30	£ 31
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-10-0
P. and O. Bank £10	£ 10-2-6	£ 10-12-6
MILLS		
Bangalore W. C. and S. Ord. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	92	...
Buckingham and Carnatic Ord. Rs. 100	...	197½
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	122	123
Coimbatore Rs. 100	150	160
Coimbatore Malls Rs. 85	...	85
Gokaks Rs. 100	105	110
Maduras Rs. 100	410	...
INDUSTRIALS		
Deccan Sugar Ord. Rs. 500	875	...
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100	106	110
E. I. Distilleries and Sugar Factories Ord. £0-16-0	15s.	17s.
E. I. D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	63	65
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-10-0	3-14-0
Singareni Collieries, Rs. 10	9½ c.D.	10 c.D.
W. E. Smith Ord. Rs. 100	47	50
W. E. Smith 6 per cent. Prefs. Rs. 100	85	90
Spencers Ord. Rs. 100	150	155 c.D.
Spencers 6 per cent. Prefs. Rs. 100	98	99
Spencers 7½ per cent. 2nd Prefs. Rs. 100	112	116
Tata Iron and Steel Ord. Rs. 75	58	60
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	72	75
United Breweries Ord. Rs. 75	132½	135
United Breweries 6 per cent. Prefs. Rs. 100	90	95
PLANTING		
Cochins Rs. 15	55	60
Eddivannas Rs. 15	29½	31 x.D.
Kalajas (Rs. 15) Rs. 9	8½	9½
Kinalurs Rs. 10	33½	35
Kuttiadis Rs. 15	19	20
Malankaras Rs. 30	115 c.D.	117 c.D.
Peermades Ord. Rs. 10	28 x.D.	28½ x.D.
Peria Karamalais Rs. 15	48	50 c.D.
Periasholas Rs. 10	7	7½
Periyars Rs. 10	21	23
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	4½
Thodapuzhas Rs. 10	33	35 c.D.
Thirumbadis Rs. 10	22	24
Tropical Plantations Rs. 22½	22 c.D.	22½ c.D.
United Nilgiris Rs. 100	115	117½
Vellamalais (Rs. 15) Rs. 13	...	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 47] SAT., NOVEMBER 20, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	781	B, Wynaad ...	787
Personalia ...	782	C. Central Travancore ...	790
Letters to the Editor—		South Mysore District Notes...	795
A. Representative Teams...	783	A Rubber Survey...	796
B. Shorts ...	784	The New S. D. ...	798
District Association Meetings—		Commercial and Meteorological.	799
A. Nilgiris ...	784		

EDITORIAL NOTES

Bud Grafting of Rubber The Ceylon Estates' Products Committee, at a meeting on November 11, in Kandy under the Chairmanship of Hon. Mr. F. A. Stockdale, Director of Agriculture, formally placed on record its emphatic and unanimous opinion that :—

' Firstly, an experimental station of about 200 acres in extent should be established for testing out the relative value of mother trees for budding purposes, and that Government should make a grant to the Rubber Research Scheme of the land required for this station ;

Secondly, that isolated seed gardens should be established for the purpose of providing selected seed from high yielders, and that Government should make grants to the Rubber Research Scheme of the necessary land for their establishment ;

Thirdly, that at least one half of the accumulated funds at present standing to the credit of the Rubber Restriction Fund should be placed at the disposal of the Rubber Research Scheme for the development of the above station and seed gardens ;

Fourthly, that the Rubber Research Scheme should be asked to secure the service of a geneticist with the least possible delay ; and

Fifthly, that Government should consider a further increase of its grant to the Rubber Research Scheme for the maintenance and development of the above work.'

Government Agricultural Officers According to Reuter, Colonel The Rt. Hon. L. C. M. S. Amery announced last week, at a luncheon in honour of the Dominion representatives, that the Colonial Office had decided that in future appointments as Officers in the Colonial Agricultural Services would be reserved for those

by whom a course of training at The Imperial College of Agriculture had been undergone.

PERSONALIA

MARRIAGE

PINKS—TAYLOR. At St. Michael's and All Angels, Polwatte, on October 18, E. Neatby Pinks, of Travancore, South India, to Dorothy L. Taylor, daughter of Mr. and Mrs. William Reynolds, Ilford, Essex, England.

FARMER.—PRIESTLEY. On Monday November 15, 1926, at Mango Range, Nilgiris; Francis Hamilton, youngest son of A. S. Farmer, St. Helens, Isle of Wight, to Eileen (Bubbles), only daughter of Bretton Priestley, Colachel, Travancore.

ON THE SICK LIST

We understand that Mr. BASIL JOHN of Karakundru Estate, Valparai, has come down to Madras in connection with an accident to his wrist.

MR. O. J. EGAN WYER of Mundakayam, who is accompanied by Mrs. WYER, has arrived in Madras, *en route* for England on sick leave.

ARRIVAL

MR. and MRS. J. A. GWYNNE are returning by the S. S. *Leicestershire* and expect to reach Chundale Estate *via* Colombo about Thursday next.

DEPARTURES

MR. J. S. NICOLLS, having handed over charge of the Daverashola Tea Company's Nilgiri Interests to Mr. R. W. LEVETT, embarks for Home with MRS. NICOLLS at Colombo on Wednesday next. We understand that MR. and MRS. NICOLLS hope to revisit South India periodically; as the former will, in all probability, make Cold-Season visits of inspection to Messrs. Brooke Bond's Southern Indian Estates.

OTHER PLANTING NEWS

MR. and MRS. W. MACKENZIE of Tallier and DR. J. S. NICHOLSON of Munnar are staying at the Hotel Spencer; MRS. C. K. OLNEY of Surianalle and MRS. J. W. TOLSON of Munnar are at the Connemara Hotel; MRS. C. LAKE is making a fortnight's stay with Mrs. Vere-Mockett; while MRS. R. S. KEIR of Munnar and E. W. SIMCOCK of Valparai were also amongst the visitors to Madras this week.

ITEMS OF INTEREST

MR. H. H. F. M. TYLER, C.I.E., becomes Commissioner of Labour in succession to Sir George Paddison, K.B.E., C.S.I., whose services—as a delegate on the Deputation to South Africa—are placed at the disposal of the Government of India with effect from Monday next.

The Government of Madras in the Public Works and Labour Department has, by G.O. No. 1675—Labour of the 9th instant, given instructions that the following notification is to be published in the *Fort St. George Gazette* and in the *Nilgiri District Gazette* in English, Tamil, Malayalam, and Kanarese:—

1. 'Under Section 4 of the Madras Planters Labour Act I of 1903, the Governor in Council is pleased to authorize Mr. R. W. Levett of Daverashola Estate, Devarashola, in the district of the Nilgiris to witness the execution of labour contracts.

2. Mr. Levett's attention should be drawn to paragraph 2 of G. O. No. 821, Judicial, dated May 15, 1906.

(By order of the Governor in Council.)

S. H. SLATER,
Secretary to Government.

LETTERS TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' views.)

A. THE U.P.A.S.I. SPORTS CLUB

THE EDITOR,

THE 'PLANTERS' CHRONICLE',

MADRAS.

Representative Teams

SIR,

It may interest the writer of the article in your issue of the 6th instant *re* the above Club to know that the High Range has already put forward a suggestion with regard to inter-district cricket. I quote from a letter written to the Honorary Secretary of the Club on the 18th ulto. :—

' So far as the High Range is concerned, we are in favour of the continuation of the matches *versus* Madras ; but consider we might put up a better show if men got more practice during the year. With this object in view we have the following proposal to make with regard to inter-district cricket. We fully realize the difficulties there must be with regard to this and suggest the following as a tentative measure this coming dry weather :—As you know, the two largest districts so far as the Sports Club is concerned are the Anamallais and Kanan Devans ; and we propose that these two districts play a match at Coimbatore and the winners play a " Rest " team at the same place but at a different time. . . . Of course, if any other district (or perhaps a combination of two districts) was able to raise a team it would make things better. We have not approached the Anamallais on the subject ; but personally I feel sure that if the Committee agree to the proposal they would raise a team.'

The writer of your article is quite sound on the subject of Rugger, but what he says is really another argument in favour of holding Planters' Week in Bangalore immediately after the Planters' Conference in August. In this case the ' Carver ' Rugger Cup could be played for there and then ; after which the team for the Madras tournament could be chosen, and I have no doubt Bangalore would oblige with a practice game. It would only then remain for the team to keep in training for four weeks or so. But so long as Planters' Week is in Ooty it is almost essential that the ' Carver ' Cup should be played for there. Last year three teams entered for the tournament and this brought a large number of the younger men to the Meet ; and, to make it a success, we want as many of them there as possible.

The suggestion that the Sports Club should, if necessary, help the districts is, I think, an excellent one ; in fact I should like to go a little further and see the Club take just as much interest in district and inter-district games as they do in the Annual Meeting. Every member of the Club can attend the former ; whereas a large majority are either unable to get away or cannot afford to attend Planters' Week.

Yours, etc.,
STUART HAWKINS,
President.

November 13, 1926.

B. On Shorts

THE EDITOR, 'THE PLANTERS' CHRONICLE', MADRAS.

SIR,

History is silent on the origin of these useful garments. Cicero when he exclaimed ¹ 'O! Bracatae cognationis dedecus' was probably referring to ² trousers. Albertus Rubenius helps us no more than he did the father of Tristram Shandy in the article of breeches. I reject the claim put forward by Scotsmen, with their usual assurance, that they are a kind of improved sporran. The most likely originator is some impoverished Planter who, having worn his trousers to shreds, found the coolness and comfort of a mere residuum, so to speak. It then only required the moral force and determination for which planters are so famous to push the new discovery to its limits. They caused a scandal in high quarters. But now, in India, men can expose their legs nearly as much as their sisters at home. This seems a small point. But there is more behind all this than meets the eye. Now is the time for men to follow women, as they have done; and work for emancipation in dress. Later on, black coats, boiled shirts and stiff collars will follow suit. Even now, a few bold spirits appear on a 1st P.O. deck in shorts; and the Captain no longer orders them to the hold in irons. Has no one the spirit of courage and self-sacrifice to appear on a crack links, say Sandwich, in shorts? The first martyr will probably be beaten to death with niblicks. But the seat of high golf will be agitated, the bottom will fall out of the opposition, and they will not have a bare leg to stand on. In short, or rather in shorts, the cause will have triumphed.

Yours, etc.,

'L. N.'

November 15, 1926.

⁽¹⁾ Written [Cic. Pis. 23] sarcastically of Piso: 'bracatus,' i.e., clad in trousers, being used in opposition to 'togatus,' and hence as a synonym for 'foreign' or even 'barbaric.'

⁽²⁾ 'After my father had debated the affair of the breeches with my mother, he consulted Albertus Rubenius upon it.' Tristram Shandy, vi. 19. Ed.)

DISTRICT ASSOCIATION MEETINGS

A. NILGIRI PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of a General Meeting of the Nilgiri Planters' Association held at 11 a.m.
on November 11, 1926, at the Coonoor Club

Present

Mr. A. K. Weld Downing, (*Chairman*), Capt. E. G. Windle, Col. L. L. Porter, Capt. R. F. Bryant, Capt. C. St. John Ives, Messrs. W. A. Cherry, C. Vernede, Phil. Beaver, Percy Reed, J. Backhouse, J. N. Smith, H. S. Cameron, J. P. Waldeck, Chris. W. Hayne, A. N. Hearn, R. Bake, P. V. Cherian, J. Erskine, J. C. Elkington, R. L. Stuart, L. F. Lake, H. G. Cotton, C. L. Graig and G. W. Hollings (*Honorary Secretary*).

Two minutes silence was observed.

Notice calling Meeting was read. Minutes of previous meeting were taken as read.

Report of the Nilgiris Delegates to the U.P.A.S.I. Annual Meeting at Bangalore

GENTLEMEN,

We attended the 33rd Annual General Meeting of the U.P.A.S.I. held at Bangalore from August 23 to 26, 1926.

The Book of Proceedings has been in your hands for some time, we shall not therefore take up much of your time, particularly as the Agenda for this meeting is a fairly full one.

Scientific Department.—Arrangements for scientific work on Tea and Rubber are satisfactory. Owing to the resignation of Dr. Leslie Coleman, the scientific position of Coffee is, at present, not so satisfactory. The Mysore Durbar seem anxious, with the co-operation of U.P.A.S.I., to put scientific research work on Coffee on a satisfactory basis. Should the recommendation of the U.P.A.S.I. be carried out by the Mysore Durbar, it is probable that scientific work on Coffee will soon be established on a satisfactory basis.

Labour Conditions on Estates.—Caused some discussion. It was resolved that the Commissioner of Labour be invited to inquire into the condition of labour on Tea, Coffee and Rubber Estates.

Coffee Cables.—We ascertained that these were to be continued in *The Planters' Chronicle* from October to May.

Road Fund.—The recommendation, which we supported, to the Government of India for the establishment of a Road Fund to be administered by a Road Board, on similar lines to that at Home, seems likely, from reports of recent speeches by the Finance Minister, to be taken up by the Government of India. It is hoped when the Board has functioned for a year or two, with reduced Import Duty and Taxation on commercial vehicles, mechanical transport on good roads will solve our transport difficulties.

Budget and Finance.—We supported the resolution to place Rs. 20,000 of U.P.A.S.I. funds to reserve; provided surplus of Tea Cess Fund was reserved for use by Tea Scientific Department.

Sports Club.—The date and venue of the next Planters' Week was fixed for latter half of February at Ootacamund.

Arising from matters discussed at the U.P.A.S.I. Annual General meeting; we have to put forward our views, with any recommendations we consider necessary, on the proposed repeal of the Madras Planters' Labour Act I of 1903, Local Labour Rules and Systematic Reduction of Advances to Labour.

We have to thank you for having had the honour of representing this Association at Bangalore and shall be glad to answer any questions.

A. K. WELD DOWNING }
C. W. HOLLINGS } *Delegates.*

Local Labour Rules.—The Honorary Secretary was introduced to inform the Director, Labour Department, that Local Labour Rules did not exist in this District.

Fines.—Letter from The Secretary, U.P.A.S.I., was read and recorded.

Stamp Duty on Cooly Contracts.—The Meeting was of the opinion that repeal, by Government, of the Concession granted in connection with the above contracts would adversely affect coolies and be a real hardship, it was hoped that joint representation would induce Government to continue the concession.

Propaganda Labour.—Letter from The Superintendent, Coimbatore Division, was read, the Honorary Secretary was instructed to forward the letter to the Association's Representative on the Control Committee.

Madras Planters' Labour Act 1 of 1903.—Proposed by Capt. E. G. Windle, Seconded by Mr. H. S. Cameron. 'This Association is unanimously of the opinion that the period of grace allowed should be three years from April 1, 1927, to give sufficient time for the gradual reduction of advances, as far as possible; secondly, to allow of observation of the result of these reductions and the advisability of future legislation.

Carried.

Conditions on Estates.—The correspondence was read and recorded.

Reduction of Advances.—The Honorary Secretary was instructed to inform the Secretary, U.P.A.S.I., that while this Association is in favour of the gradual reduction of Advances to labour, it does not consider, under the varying conditions existing in different parts of this District, that advances can be standardized.

Roads and Communications.—Letter from the S.I.R. regarding proposal for a Ropeway was read and recorded.

Ghaut Road at Kateri Road Toll Gate Corner.—A Sub-Committee consisting of Mr. A. K. Weld Downing (*Chairman*), Messrs. H. S. Cameron, H. G. Cotton, Norman Grey, and Capt. R. F. Bryant met the Superintendent Engineer, P.W.D., Coimbatore Circle, on November 9 and reported that the site was inspected. The Superintendent Engineer realized the gravity of the situation and will take all possible steps to endeavour to prevent further slipping at this point.

Kateri Road Station Goods Shed.—Proposed by Capt. R. F. Bryant, seconded by Mr. C. L. Greig, 'In view of the correspondence between the Association and the S. I. R. regarding the new Goods Shed, the Honorary Secretary be asked to write and ascertain why the proposed shed has not been constructed.'

Carried.

Proposed Trunk Road, Mettupalayam—Kotagiri—Coonoor.—Proposed by the Chair, 'If the funds of the Association permit to contribute Rs. 100 towards the cost of turning the present Road into a Trunk Road.'

Carried.

Banking Facilities.—Letters from three of the European Banks were read and recorded.

Assessment Land Revenue.—Letter from the Collector, the Nilgiris, reference more detailed Demand Notes was read and recorded.

Location of Liquor Shops.—Letter from the Collector, the Nilgiris, was read. While the Association have no recommendations to make regarding change of sites, the Honorary Secretary was instructed to write and ask the Collector for the total abolition of the Liquor Shop at Kallar.

Pilferage of Tea Plants.—Proposed by Mr. Percy Reed, seconded by Capt. E. G. Windle. 'That when the Madras Pilferage Act is considered by the U.P.A.S.I. theft of Plants, Seeds, etc., from Nurseries and Plantations be included in the Act.'

Carried.

Refund of Duty on Imported Tea Cheats.—Letter from the Secretary, U.P.A.S.I., was read and recorded.

Poomanoo Estate.—Resignation was accepted as from September 30, 1926, but it was placed on record that the Association disagree with the neglect of the late owner to notify the Association of the sale.

Emerald Valley Estate.—The small sum owing by the Estate to this Association, on resignation, was written off.

Proposed by the Chair, 'The Association unanimously place on record their regret that Capt. Windle withdraw his candidature as Planting Member of the Legislative Council; and accord to him a hearty and sincere vote of thanks for his exceptionally able services on the Council, ungrudgingly given, and highly appreciated by the Planting Community.'

Carried.

Proposed by Capt. E. G. Windle, seconded by Mr. G. W. Hollings, 'The Association unanimously tender their sincere sympathy to the Chairman on his loss in the recent death of his mother.'

Carried.

G. W. HOLLINGS,
Honorary Secretary.

A. K. WELD DOWNING,
Chairman.

B. WYNAAD PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Meppadi Club,
on Wednesday, November 3, 1926, at 2.15 p.m.

Present

Mr. B. M. Behr (*Chairman*), Messrs. A. R. H. Angus, G. Q. Archard, D. Bate, J. E. Bisset, B. St. J. Boulton, W. G. Craig, H. C. Davies, C. E. A. Ewart, E. E. Eyre, T. P. Gauld, H. J. C. Hammond, R. W. M. Hay, L. C. G. Hayne, E. Janzen, R. A. Leslie, M. W. Mackay, E. R. Peachy, S. H. Powell, K. W. Rowe, and I. W. Finlayson (*Honorary Secretary*).

The notice calling the meeting was read.

The minutes of the last meeting were taken as read and confirmed.

1. Report of the Delegates to the U.P.A.S.I. Annual General Meeting, 1926

The Honorary Secretary read the following report :—

GENTLEMEN,

As your representatives at the 'Thirty-third Annual General Meeting of the U.P.A.S.I. we have to submit our report. As the Book of Proceedings has already been circulated to all members we touch only on vital matters which closely affect our Association.

LABOUR

I. *Laws*.—Act I of 1903. The Committee appointed by Government has held several meetings and has not yet submitted its report to Government.

II. *Furlough*.—As instructed by you we submitted a resolution that European employees of the Labour Department should not be granted furlough between February and the end of May except for special reasons, but this was not passed on being put to the Meeting.

III. District Associations have been asked to consider the question of reduction of advances brought forward by the Coorg Planters' Association Delegate and I have put this matter on the agenda of to-day's meeting.

IV. *Conditions on Estates*.—The whole matter of the recent statements in the press was thoroughly discussed and a resolution finally passed inviting the Commissioner of Labour to enquire into the conditions of Labour on Tea, Coffee and Rubber Estates.

Since the meeting the Secretary, U.P.A.S.I., has informed me that in reply to our invitation the Commissioner of Labour has stated that he is unable to accept as he is about to leave for South Africa and that the matter may be taken up with his successor, when he is appointed.

V. *Book of Rules*.—As you will see from the Book of Proceedings a useful resolution was passed regarding the issue of a book containing all Labour Rules and procedure.

SCIENTIFIC DEPARTMENT

One of the most important subjects discussed was that of the re-organization of the Scientific Department and we are indebted to Mr. Carpenter of the Indian Tea Association, Scientific Department for his advice in this connection. The Executive Committee's scheme with a slight amendment was passed unanimously. The amendment provides

that the Assistant to Dr. Shaw should be capable of carrying on the work at the Station while Dr. Shaw undertakes the touring required.

It was resolved to engage Dr. Shaw's Assistant at once and that the other provisions of the scheme come into force from the 1st of the financial year.

A resolution was also passed asking the Indian Tea Association to permit an annual visit and report by Mr. Carpenter on the U.P.A.S.I., Tea Scientific Department.

Land Assessment and Settlement.—A resolution was passed asking Government to postpone collection of the amounts claimed on account of the Wynaad Re-settlement Survey charges until we have had opportunity of meeting the Officer-in-charge of the Survey Party and putting our case before him. In this connection we may say that the Nilgiri-Wynaad Planters' Association has invited this Officer to meet them at Gudalur but so far the invitation has not been accepted.

Roll of Honour.—As instructed we supported the suggestion that this be placed in the U.P.A.S.I. Office, but the Secretary pointed out that we only shared the Office with the Chamber of Commerce and the point could not be pressed further. The roll is to be placed in St. Stephens Church, Ooty.

Road Fund.—We strongly supported the resolution recommending Government to establish a Road Fund in India as anything tending to improve the roads in this country is undoubtedly to the benefit of this Association.

Indian Employees' Provident Fund.—Your delegates spoke in favour of this and put up a resolution that this Fund should be started as soon as possible as they knew this Association was in favour of anything which would increase the efficiency of the Labour Department.

These I think are the most important subjects which affect us in particular but if there is any other point on which the meeting desires information we shall be glad to supply it to the best of our ability.

B. M. BEHR
I. W. FINLAYSON ... } *Delegates.*

The Chairman then made some further remarks amplifying the report.

Mr. J. E. Bisset proposed a hearty vote of thanks to the Chairman and Honorary Secretary for the able way in which they represented the Association at Bangalore and this was accorded.

2. Labour

I. *Reduction of Advances.*—The Honorary Secretary read the resolution passed at Bangalore. It was resolved that consideration of this matter be deferred.

II. *Act I of 1903.*—The Honorary Secretary read the correspondence received from the Secretary, U.P.A.S.I. and the Chairman informed the meeting with regret of the latest development in this important matter.

III. *Conditions on Estates.*—Read all correspondence from Secretary, U.P.A.S.I., on this matter.

IV. *Stamp Duty on Cooly Contracts.*—The Meeting was informed regarding the proposed repeal by Government of the concession granted in connection with the Stamp Duty on cooly contracts and agreed to leave the Executive Committee, U.P.A.S.I., to deal with the matter.

V. *Deduction from Wages or Payment in Respect of Fines.*—This matter, also being dealt with by the Executive Committee, was considered by the Meeting.

VI. *Report of Coimbatore Control Committee Member.*—Read a letter from the Committee in regard to Propaganda Labour. This subject was fully discussed and Mr. Gauld gave some idea of what was proposed to be done regarding this in future.

Estates wishing to take Propaganda Labour were asked to send in their applications to the District Labour Committee through the Honorary Secretary.

VII. *U.P.A.S.I. Labour Rules.*—Mr. Gauld brought up the subject of the U.P.A.S.I. Labour Rules and suggested an alteration or an amendment to Rule XV. At the Chairman's request Mr. Gauld agreed to bring this matter before the District Labour Committee.

VIII. *Mangalore Control Committee.*—The Chairman outlined the position in this Division regarding Labour Co-operative Societies.

IX. *Mysore Control Committee.*—Mr. Bisset gave a resumé of the proceedings of the last meeting of this Committee.

3. Malabar District Board

I. *New Licenses.*—The Honorary Secretary said he had circulated the rules regarding licenses to all members and had also written the President, District Board, regarding the interpretation of the rule for dangerous fuel or machinery. No reply had been received from the Board and a reminder had been sent.

It was suggested that the Chairman when in Calicut should take steps to secure legal advice regarding the profession tax which the Board were proposing to enforce shortly and this was unanimously agreed to.

II. *Representative on the Board.*—The Chairman explained that he had written three times to the President of the Board asking that the Association should as formerly have a representative on the Board but he had not so far been accorded even the courtesy of an acknowledgment.

4. Roads

Read letters from the District Board Engineer regarding the progress made in repairing the Nadughani Ghaut and the Sultan's Battery-Gudalur Road (Malabar Section).

Mr. Gauld brought up the matter of the overloading of timber carts and was requested to write the Honorary Secretary giving details with a view to further action being taken.

The Honorary Secretary was asked to write the District Board Overseer drawing attention to the dangerous practice of stacking repair metal on the sides of the road at blind corners.

5. Government Unemployment Committee

The Chairman read the replies sent to the Commissioner of Labour by the Committee appointed at the last meeting. These were approved by the meeting. There was no objection to their being published if required.

6. Cost of Baskets

The meeting discussed the current rates in the District and resolved to resist any effort to raise them.

7. Election of Personal Members

The following gentlemen proposed by Mr. Davies and seconded by Mr. Powell were elected personal members of the Association :—

Mr. H. H. Tippetts.

Dr. W. Thyne.

The Meeting then closed with a hearty vote of thanks to the Chair.

I. W. FINLAYSON,
Honorary Secretary.

B. M. BEHR,
Chairman.

C. CENTRAL TRAVANCORE PLANTERS' ASSOCIATION (INCORPORATED)

Proceedings of Second (1926-27) Quarterly General Meeting held at the Peermade Club
on Saturday, October 30, 1926 at 10 a.m.

Present

Messrs. E. C. Sylvester (*Chairman*), T. A. Kinmond, R. J. McMullin, B. P. Tailyour, M.C., R. F. Vinen, H. Clarke, A. Mactavish, A. H. J. How, J. M. Wilkie, W. S. Rowson, W. F. Inman, J. F. Fraser, R. Tait, C. J. Madden, W. B. Glenie, A. Hamond, W. F. Anderson, A. B. Gordon Graham, R. B. Webb, H. Gibbon, Dr. Moore and G. S. Napier-Ford (*Honorary Secretary*).

Notice.—The Honorary Secretary read the notice calling the Meeting and the Agenda.

The Chairman addressed the Meeting as follows :—

‘GENTLEMEN,

Before proceeding with the business of this Meeting I should like to ask you to accord a vote of sympathy to the widow and family of the late Mr. D. G. Cameron who died in August last. Mr. Cameron was a pioneer of the planting industry in this country and was for years closely connected with this District. His son is Mr. T. H. Cameron, our Commissioner.’

This was passed in silence all Members standing.

1. *Minutes.*—The Minutes of Committee Meeting and First Quarterly General Meeting held on July 10, 1926, at Vandiperiyar Club, were taken as read and confirmed.

2. *Correspondence.*—The following correspondence was read by the Honorary Secretary :—

(a) Between himself and the Travancore Combined Planters' Association with regard to possible Export Tax on Rubber. The Meeting decided that this Association being entirely concerned with Tea was not in a position to offer any suggestion.

(b) Letter from Army Head Quarters, India, dated August 3, 1926, with reference to New Regulations for the Army in India Reserve of Officers; and the Honorary Secretary informed the Meeting that he had applied for copies of the New Regulations which would be forwarded to every Member of the Association when obtained.

(c) Dealing with the accommodation provided for First Class Passengers in the Trivandrum Express; the following resolution was proposed from the Chair and carried unanimously :—

‘That this Association do approach the Agent, South Indian Railway; drawing his attention to the inadequacy of accommodation and lavatory arrangements for First Class Passengers in the Trivandrum Express, and request him to improve matters as soon as possible.’

(d) The Honorary Secretary drew the attention of the Meeting to a Notification in the *Government Gazette* advertising sale by auction of a block of land in Peermade Pakuthy; and placed on the table a plan showing the position of the land.

The Honorary Secretary read letter from Mr. R. P. Roissier, dated October 19, 1926, intimating his resignation from all branches of the U. P. A. S. I. including C. T. P. A. on behalf of Fairfield Estate. The Meeting expressed regret that Fairfield Estate was leaving the Association.

Mr. McMullin then read the following report of

The Central Travancore Delegates to the U. P. A. S. I. Annual Meeting, August 1926

MR. CHAIRMAN AND GENTLEMEN,

As your representatives at the Annual General Meeting of the United Planters' Association of South India held at Bangalore on August 23, we make the following report:—

Not wishing to take up your time unnecessarily we will only refer to the most salient points, as you have no doubt read the full details of the Meeting in the papers.

The point which strikes us as the most interesting from your outlook is that of the new reorganization of the Scientific Department and we have pleasure in stating that in the main the matter has been settled in accordance with your wishes, and as set out in the circular letter from the Secretary of the U.P.A.S.I. issued before the meeting and discussed by you at the last general meeting held here.

We pointed out the need for a sub-station for this District for the study of our peculiar conditions; but we could get no support either from other members of the meeting or from Mr. Carpenter who, although agreeing that the end to aim at was a chain of sub-stations throughout the planting districts of India, considered that the first thing to be done was to get the initial organization in proper working order before launching out on further ventures. And although we tried to contest the point without avail, we are at heart quite in agreement with him.

As you will have read the meeting authorized the engagement of an Assistant to Dr. Shaw as soon after the beginning of the financial year as possible. This assistant is to spend two months with Dr. Shaw at Nellacottah so as to get an idea of local conditions, before proceeding to Tocklai for a six months' course of training.

In connection with this we would like to say that we were the initiators of the proposal that the I. T. A. be asked to allow Mr. Carpenter to visit, and report annually on our experimental station.

Our request that a vote of thanks be given to Mr. Munro for his services was applauded; but for some reason which we were not able to explain a formal vote of thanks was not recorded.

The next point of interest is the proposal to form a Road Fund throughout India thereby doing away with tolls as far as mechanical means of transport are concerned. Mr. Tailyour was put on to a special committee to go into the matter, and the final result of the discussion you have doubtless seen.

Knowing your interest in this matter and your desire to institute a means of controlling cart traffic over all roads we enquired why all vehicles could not be included ; but had to be satisfied with the reasonable explanation that this would mean a tremendous task which at present could not be considered, and would in all probability upset any attempt at legislation whatever.

There was a considerable discussion on Political Representation, and we must congratulate Mr. Congreve on his very able speech in support of a continuation and strengthening of this as well as the generous manner in which the Mundakayam representatives withdrew their adverse resolution.

The copies of the articles handed us by our Secretary for production before the meeting emphasized the need for a strong policy being adopted by us all to counteract the growing adverse propaganda against us by a certain section of the Indian Community ; and it behoves us to use every effort to refute the very unjust charges levied against us. We therefore wholeheartedly supported Mr. Congreve in his advocacy for strengthening our political status.

We have pleasure in reporting that our resolution for having all the rules and methods of procedure of the Labour Department consolidated in proper form and distributed to all members was carried unanimously and the Director of the Department and the Secretary of the U. P. A. S. I. were instructed to proceed with the matter forthwith.

We supported all resolutions regarding the Labour Department, except that of providing a Provident Fund for native employees as instructed by you. The latter motion was however carried by a majority and a Provident Fund will be instituted. This we trust will be a step in the right direction, and will increase the efficiency of the Department ; but we cannot help saying that, whilst congratulating the native employees of the Labour Department, we must condole with their brothers of the Planting Sections in not having the probability of a like provision for at any rate some time to come.

In the matter of roads we refrained from mentioning out pet grievance, although Mr. Sylvester kindly took the trouble to obtain the figures of the toll receipts from the Kumily Ammayanakanur Road. But seeing that there is every evidence of the Madura Road Board's intention of carrying out their promise we did not think it necessary to bring up our hardy annual ; especially as some of the roads we encountered on our way to Bangalore made travelling over the section in question seem a luxury in comparison.

You will have seen that the Venue for the annual sports week has been fixed for the second half of February at Ooty for 1927. But we felt bound to sympathize with the coffee planters who are debarred from attending on account of this season being the one time of the year in which they cannot leave their estates. We therefore supported the meeting in suggesting that all Associations be circularized to ask if there would be any objection to holding the 1928 Meet later in the year. Bangalore was suggested as the Venue ; as Ooty is said to be wet at that time. This will of course come under discussion later and needs no comment now.

We would like whilst on the subject of the Sports Fund to draw the attention of members to the extremely difficult task of the Secretary; and to ask them to try and support him in every way possible. Mr. Fulcher has the hardest and most unproductive job of anybody in the U. P. A. S. I. as most of his very unselfish efforts seem to be met with a discouraging lack of response; and he deserves the greatest credit for his continued attempts to keep the thing in being. We were present at the Committee Meeting on the 22nd, and noted the apathy with which the whole concern was met. His efforts to get together a football team to meet our fixture with Madras were painful; and it would be a great feather in our caps if we could do something to support him and the Chairman Mr. Behr's very sportmanlike endeavours.

We do not think there is anything much more to mention. There should be no objection to the increase of the reserve fund of the Association by Rs. 20,000; although this amount will come from the excess of funds accruing from the tea cess, as this sum will not, we were assured, affect us in any way. And it is satisfactory to know that the Association is strengthening its position by accumulating a substantial reserve against further needs.

We congratulate the Association on the unanimous re-election of Mr. R. Fowkes as Chairman, who is also to be congratulated on his tact and able handling of the Association's affairs during the past year. And we must congratulate ourselves on the election of a very able representative on the executive committee for our particular product in Mr. A. C. Cotton.

A hearty vote of thanks was accorded to Messrs. McMullin and Tallyour for so ably representing us, and for producing their very interesting report.

3. The question of expenses of Delegates to the Bangalore Meeting and the following resolution was proposed from the Chair:—

'That the expenses allowed to Delegates of this Association to the U. P. A. S. I. General Meeting at Bangalore be Rs. 400 for each Delegate; and that this resolution shall be retrospective so as to cover the recent Meeting in August 1926.'

Carried unanimously.

Mr. McMullin thanked the Meeting.

4. *Election of Sri Mulam Delegate.*—Mr. R. J. McMullin was unanimously elected to represent the Association at the forthcoming Session of Sri Mulam Popular Assembly.

Mr. H. Clarke was elected as Member-in-Waiting.

The Meeting decided to adopt the following subjects:—

1. Renewal of Motor Driving and Gun Licenses.
2. Cart Registration.

5. *Planting Member, Madras Legislative Council.*—With the permission of the Meeting this item was withdrawn from the Agenda; as Mr. Congreve had already been elected as Planting Member to Madras Legislative Council.

6. *Planting Member—Travancore Legislative Council.*—The Honorary Secretary read letters :—

1. Dated October 21, 1926, from the Mundakayam Planters' Association; with enclosure showing that Mr. Murphy was prepared to stand for election but would possibly be absent from the country for some months during the current year.

2. Dated October 11, 1926, from the Travancore Combined Planters' Association intimating that Mr. L. A. Lampard was prepared to stand for election.

The following resolution was proposed by Mr. McMullin and seconded by Mr. Clarke :—

'That this Association do support Mr. L. A. Lampard as Planting Member of Travancore Legislative Council.'

Carried.

7. Read letter from the Secretary, U.P.A.S.I., dated August 27, 1926, asking for opinion of this Association on Coorg Planters' Association proposal for 'Combination of Members of U.P.A.S.I. for systematic reduction of advances to Labour.'

Considerable discussion ensued—the Meeting decided that the proposed combination was impracticable.

The following resolutions were proposed by Mr. Kinmond, seconded by Mr. Tailyour, and carried :—

(1) 'That, in cases of appeals to the Executive Committee from the Control Committee's decision on labour cases, the Executive Committee be asked to give detailed reasons for their decision for guidance of Control Committee in similar cases.'

(2) That an additional rule be added to the U. P. A. S. I. Labour Rules as follows :—

If any Kangany indebted to an Estate is discharged from that Estate, and his debt written off; the Labour Department shall be notified of such discharge, and the Estate shall have no further claim on the man or his debt.'

Minutes of Coimbatore Control Committee Meeting held at the Coimbatore Club on Monday, October 25, 1926, were laid on the table.

8. *Grant-in-Aid Roads.*—The Honorary Secretary, Peermade Road Committee, read letter from his Committee explaining the present situation. The Meeting instructed the Honorary Secretary to write Government representing our urgent need of a large contribution towards the upkeep of these roads.

9. *Bonami Post Office.*—Correspondence was read, and the Honorary Secretary was instructed to write to Mr. Roissier asking if he is prepared to provide a Clerk on Rs. 15 per mensem and a building free of rent.

And also to write to the Post Master General asking him to further consider the possibility of establishing a Sub-Office at Bonami or Fairfield.

10. *Planters' Benevolent Fund.*—The Chairman made an appeal to all Members who had not subscribed to this Fund to do so and all present who had not already paid agreed to do so by V. P. Post.

11. *Cart Registration.*—The Honorary Secretary was instructed to take over the number plates and rollers at present at Munjamullay, and to distribute them to those Estates which had originally asked for them.

12. *Newspaper Defamation*.—Mr. Hamond called the attention of the Meeting to various defamatory articles in certain vernacular newspapers; and the Meeting decided that it was beneath the dignity of the Association to take notice of them.

13. The following resolution was proposed by Mr. McMullin and seconded by Mr. Clarke :—

‘That this Association elects a Sub-Committee to advise on and help co-ordinate the methods of controlling Pests and Diseases in this District.’

Carried.

The First Sub-Committee was elected as follows :—

Messrs. R. J. McMullin.

H. Clarke.

W. F. Inman.

With a vote of thanks to the Chair and to the Honorary Secretary, Peermade Club, for the use of the room the Meeting terminated.

G. S. NAPIER-FORD,
Honorary Secretary.

E. C. SYLVESTER,
Chairman.

SOUTH MYSORE DISTRICT NOTES

The Wartyhully Golf Club held a most interesting and enjoyable series of matches from November 4 to 6; Mr. and Mrs. Lake being ‘at home’ with their usual bounteous and widespread hospitality. The course was in excellent order though more rain would have been welcome on this as on all other accounts. The following is a list of the events; for which chic and suitable prizes were presented by various members of the Club.

Medal Round	...	1st Easton.
		2nd Mrs. Denne and Gillespie (tie).
Foursomes	...	1st Easton and R. C. Lake.
		2nd Mrs. Denne and C. Lake.
Match Play	...	1st Easton.
		2nd Davies.
Flag Competition	...	1st Godfrey.
		2nd Davies.

Lowest score (9 holes). Easton 46—10 = 36.

On the third day some horse and motor bike trials provided some exciting and original turns :—

1. 3 furlongs. Wartyhully horse, R. C. Lake up *v.* Baithney horse, Davies up. Baithney wins by 10 lengths.

2. 9th hole gradient 1 in 3. Norton OHV bike, Easton up *v.* Baithney horse, Davies up and Wartyhully horse, R. C. Lake up. Level start. Bike wins.

3. Easton's OHV Norton. 3½ H.P. *v.* R. C. Lake's S.V. A.J.S. 2¾ H.P. 2 races. Won by R. C. Lake's by 1 length.

As the evenings were drawing in, play stopped at six; when the younger members of the party indulged in sing-songs and the staid members, subsequently not simultaneously, in Bridge.

The golf, as a whole, while not of the highest order, was steady and consistent. The old stagers, Godfrey, C. Lake and Denne (bar one who shall be nameless) kept their end up well; but 3 or 4 younger players are coming on fast, and they will have to look to their laurels.

‘Your Honorary Correspondent.’

A RUBBER SURVEY

BY

GEORGE O. MAY

(Continued from Page 776, issue of November 13, 1926)

Rubber trees do not come into production until from four to six years after they are planted, and do not attain their full production for from eight to ten years. Consequently the effects on the potential annual supply of the steady increase in the planted area prior to 1920 will continue to be felt for some years, and the effects of the practical cessation of new planting during the last five years lie almost wholly in the future.

The great increase in the demand for rubber has, of course, arisen in connection with the automobile industry and has therefore been most marked in the United States. Nevertheless, with the single exception of a substantial investment by one American rubber manufacturing company, the development of plantations has been carried out almost entirely by foreign—and particularly British—capital, first in British colonies and protectorates, and later in the Dutch East Indies and elsewhere.

The fact that only a negligible amount of American capital has flowed into an industry in which this country is so largely concerned would seem to be of great significance in any adequate study of the rubber situation, but it does not appear to have been extensively considered, **NOR IS IT EXPLAINED BY THE COMMITTEE.**

In 1921 and 1922, as a result of the constant increase of supplies and the industrial reaction of 1921, the level of rubber prices fell close to, or below, cost of production. With the new acreage constantly coming into production there was apprehension among the growers that production would continue to exceed consumption and there was demand for action to restore the industry to a profitable basis. An inquiry was initiated by the British Colonial Office and resulted in the adoption of what is commonly known as the Stevenson Scheme of Restriction. This scheme established a system of standard production in Malaya and Ceylon—which together were then producing about 70 per cent of the plantation rubber—and provided for a limitation of export according to a sliding scale of percentages of production to be applied as the price of rubber rose or fell. Export in excess of the authorized percentage was effectively prevented by a prohibitive export tax.

Whether the action taken was wise in the light of conditions then existing is an arguable question. Business men and economists would agree that the presumptions are against interference with the natural operation of the laws of supply and demand, but there is to-day a greater readiness than before the war to admit that the presumptions may be overcome, and that steps may in some cases be desirable to modify the harshness with which these laws at times operate. The committee responsible for restriction frankly described it as a temporary palliative which they recommended, only because its consequences seemed likely to be less injurious than the alternatives which presented themselves. The fact that the scheme was approved by the Government of a country which has for generations stood on the principles of free trade and a minimum of governmental interference with commerce might have been deemed to lend credence to these statements.

The evidence taken by the committee on the question of the economic wisdom of the policy in the light of conditions existing in 1922 **INCLUDED NO TESTIMONY ON BEHALF OF THE GROWERS**, nor even that of impartial economists, **BUT WAS MAINLY PARTISAN AND WHOLLY INADEQUATE.** The members of the

committee apparently gave scant consideration to this question and contented themselves with dogmatically asserting that such controls 'violate economic law and produce disastrous economic results both to producer and consumer.' It is by no means clear that the detailed findings bear out this sweeping statements.

II

In opening the case before the committee the Secretary of Commerce said: 'The object of these controls is universally asserted to be to stabilize prices to both producer and consumers at fair rates, and we would probably not be considering the question to-day if all these combinations had been content with fair returns, no matter how much we might object to them in principle.'

The committee's findings regarding the practical results of restriction may be summarized as follows:—

First, that, while restriction has stimulated supplies from non-restricted areas which have in part offset the loss of production in the restricted areas, the net effect has been to diminish the available supply of rubber, and that the scheme continues to restrict the supply; the net loss of production for the three years to October 31, 1925, is estimated at 146,000 tons. Second, that restriction has forced prices to figures which are three times the fair price, the comparison being between a market price of \$1.09 and a 'fair price' of thirty-six cents, the fair average cost being stated to be about eighteen cents.

No exception need be taken to the findings of the committee in regard to past effects of restriction upon supply. If, however, the committee is right in estimating the new production stimulated in non-restricted areas at about 70,000 tons a year, it would seem that a continuance of this supply after the removal of restriction would quickly offset the net loss of production due to past restriction, estimated by it at 146,000 tons. Under present conditions such a continuance may reasonably be assumed, and the fair inference from the findings would therefore seem to be that, unless restriction is to be continued, **THE EFFECTS OF THE SCHEME ON SUPPLY WILL PROVE TO HAVE BEEN RELATIVELY UNIMPORTANT AND PERHAPS ULTIMATELY HELPFUL.**

From February 1, 1926, exportation of 100 per cent of standard production has been authorized. The departmental evidence regarding the effect of this action is contradictory. The Secretary, in opening the case, submitted estimates of potential output without restriction which were contained in the report above mentioned and were there said to be 'generous.' For 1925 this potential output was only some 80,000 tons in excess of the actual exports, as estimated by the committee, and on the committee's findings 100 per cent of standard production would have exceeded the permitted exports by about 110,000 tons. This evidence points clearly to the conclusion that **100 PER CENT IS MORE THAN IS IMMEDIATELY ATTAINABLE.** When, however, it was suggested to the Secretary that the raising of the standard of export to 100 per cent in effect removed all restriction, he characterized the statement as 'simply propaganda' and 'misleading,' and said, 'The general calculation is that it would require 115 per cent to 120 per cent to obtain the full potential production.' This would mean that the potential production must be from 50,000 to 100,000 tons above the department's previous estimate.

'The Atlantic Monthly'.

(To be concluded next week.)

THE NEW S. D.

BY

'E. W.'

Have you seen our new S. D. ?
The flappers all agree,
He's a very perfect planter in the making,
With his Oxford bags on Sunday,
And a clean shirt every Monday,
His glances set their timid bosoms aching.

His shorts are made by Moses,
His garments smell of roses,
His hair is brushed back even to his nape ;
His form is slim and slender,
And upon his lips a tender
Growth of hair is gradually taking shape.

As he marches down to roll,
He communes with his soul
On advances, pay, and batta, coolies ask ;
And through the live-long day,
His thoughts will rarely stray,
To matters unconnected with his task.

For him Tamil has no terrors,
And he's down upon the errors,
In the figures manufactured by the Writer ;
He can ride, or drive a car,
(And he'd hitch it to a star
If he thought it made the running any lighter).

Good at golf and good at cricket,
But thinks tennis is the ticket ;
At a Dance he is the first upon the floor,
And if damsels who have met him
Sigh and wish that they may get him,
Well,—there's quite a cosy nook outside the door

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending Oct. 16, 1926	January 1 to Oct. 16, 1926	January 1 to Oct. 16, 1925
(A) TEA (WEEKS ENDING OCTOBER 16 & 23, 1926)				s. d.	s. d.	s. d.
(a) Anamalais—			N. India.	1 7·12	1 8·21	1 5·07
Nullamudi ...	123	1 7	S. India	**1 6·18	††1 7·68	††1 5·25
Mukkottumudi ...	137	1 6 $\frac{3}{4}$	Ceylon...	1 7·79	1 8·42	1 7·64
Thayamudi ...	128	1 6 $\frac{1}{2}$	Java ...	1 1·84	1 4·25	1 0·67
Periakaramalai ...	241	1 5 $\frac{3}{4}$	Sumatra.	Nil.	1 4·95	1 4·17
High Forest ...	166	1 5 $\frac{1}{4}$	Nyassa-land.	1 1·93	1 5·37	1 1·02
Selaliparai ...	86	1 5 $\frac{1}{4}$				
Kallyar ...	192	1 4 $\frac{3}{4}$	Total ...	*1 7·04	†1 7·77	†1 5·54
Karakundru ...	125	1 4 $\frac{3}{4}$				
(b) Central Travancore			District	Week ending Oct. 23, 1926	January 1 to Oct. 23, 1926	January 1 to Oct. 23, 1925
Stagbrook ...	146	1 5 $\frac{1}{4}$		s. d.	s. d.	s. d.
Twyford and Ashley.	172	1 5	N. India.	1 6·28	1 8·13	1 5·12
White Hills ...	143	1 5	S. India	a1 4·59	b1 7·50	c1 5·29
Koliekanum ...	108	1 5	Ceylon ...	1 7·76	1 8·41	1 7·68
Karimkolam ...	151	1 4 $\frac{3}{4}$	Java ...	1 1·80	1 4·25	1 0·68
Dymock ...	128	1 4 $\frac{3}{4}$	Sumatra.	Nil.	1 4·95	1 4·17
Caradygoody ...	100	1 4 $\frac{3}{4}$	Nyassa-land.	1 3·41	1 5·42	1 0·93
Peermade ...	192	1 4 $\frac{1}{2}$	Total ...	d1 6·22	e1 7·74	f1 5·57
(c) Coorg—						
Glen Lorna ...	63	1 3 $\frac{3}{4}$				
(d) Kanan Devans—						
Sevenmally ...	80	1 7 $\frac{1}{4}$				
Chunduvurrai ...	312	1 6				
Kanniamally ...	191	1 6 $\frac{1}{4}$				
Letchmi ...	170	1 6 $\frac{1}{4}$				
Yellapatty ...	153	1 6 $\frac{1}{4}$				
Gundumally ...	197	1 6				
Guderal ...	162	1 6				
Nullatanni ...	122	1 6				
(e) Mundakayam—						
Yendayar ...	154	1 3 $\frac{3}{4}$				
(f) Niligiris—						
Ibex Lodge ...	60	1 9 $\frac{1}{4}$				
Prospect ...	122	1 8 $\frac{3}{4}$				
Brooklands ...	101	1 8 $\frac{1}{4}$				
Bhawani ...	125	1 7 $\frac{3}{4}$				
Glendale ...	139	1 6 $\frac{3}{4}$				
Craigmore ...	92	1 6 $\frac{3}{4}$				
Woodlands ...	130	1 6				
Mailoor ...	76	1 5				
(g) Niligiri-Wynaad—						
Davershola ...	186	1 7 $\frac{1}{2}$				
Seaforth ...	188	1 4 $\frac{1}{2}$				
Woodbriar ...	63	1 3 $\frac{3}{4}$				
New Hope ...	60	1 3 $\frac{3}{4}$				
Barwood ...	82	1 3 $\frac{3}{4}$				
(h) South Travancore—						
Poonmudi ...	55	1 4 $\frac{3}{4}$				
Braemore ...	65	1 4 $\frac{1}{2}$				
Invercauld ...	40	1 3 $\frac{1}{2}$				
Merchiston ...	83	1 3 $\frac{1}{4}$				
(i) Wynaad—						
Chulika ...	175	1 3 $\frac{1}{2}$				
Elstone ...	120	1 3 $\frac{1}{4}$				
Erramaculla ...	220	1 3				
Pringford ...	56	1 3				
** 2,050 †† 139,970 †† 150,419			(B) COFFEE			
a 8,425 b 148,395 c 155,614			SPECIAL CABLE, LONDON, NOVEMBER 17, 1926			
			'A' QUALITY 160s. MARKET NOMINAL			
			(C) RUBBER			
			The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, November 16, 1926, was 20 $\frac{1}{4}$ d.			
* 82,472 † 2,664,062 † 2,516,558						
d 84,179 e 2,748,241 f 2,587,109						

(b) *Précis of Reports on the London Market received on Monday, November 15, and covering the seven days ending Tuesday, October 26:—*

(1) *Tea.*—The London Tea Brokers' Association's reports, which have been a week in arrears for our past three issues, were brought up to date last Monday by the receipt of the two reports which we reproduce on the previous page. It will be noted that the South Indian average for the week ending October 23 was over 1½*d.* below that of the preceding seven days ; and indeed no other Teas showed as big a fall, though the market showed an uniform drop which averaged almost 1*d.* per pound. The Bonded stocks in the United Kingdom on September 30 were 175,012,000 lbs. as against 180,337,000 lbs., and 135,118,000 lbs. on the corresponding dates of 1925 and 1924.

(2) *Rubber.*—During the seven days under review, the London stocks increased by 1,430 tons to 41,080 tons, while the 'spot' price remained at about 1/9*d.* since the effect of the 20% 'cut' announced for November 1st was counteracted by the absence of any ruling regarding the unused coupons. The American questionnaire figures for September gave the stocks in America at the end of that month as 62,078 tons which was 1,200 tons more than the stock on August 31, 1926.

(3) *Coffee.*—No East Indians were sold at the auctions ; but we understand that 101 bags of old crop Coorg changed hands at a very satisfactory price, and that some forward business was done round about the figure of 132*s.* C.I.F. On October 23, the London stocks in bags of African, Indian, and other kinds respectively were 19,866, 8,626 and 64,447 ; as compared with 29,073, 29,070, and 103,680 on the corresponding date last year.

(4) *Pepper.*—Pepper was again firm, and fair Tellicherry was quoted at 11½*d.*

II. Weekly Rainfall Statement

From Sunday, November 7, 1926 to Saturday, November 13, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	1·32	70·53	71·85	19. Naduvattam	...	94·22	94·22
2. Kalthuritty.	1·03	112·11	113·14	20. Coonoor ...	1·88	28·94	30·82
3. Tenmalai ...	0·29	111·09	111·38	21. Kotagiri ...	1·99	45·20	47·19
4. Mundakayam.	...	150·21	150·21	22. Ootacamund	1·08	41·63	42·71
5. Peermade ...	...	177·25	177·25	23. Yercaud ...	1·53	43·26	44·79
6. Twyford ...	...	197·27	197·27	24. Devala ...	...	145·77	145·77
7. V'periyar ...	0·20	79·58	79·78	25. Gudalur ...	...	78·83	78·83
8. Kalaar ...	0·04	195·44	195·48	26. CALICUT ...	0·71	122·60	123·31
9. Chittuvurrai	1·82	38·34	40·16	27. Kuttiyadi ...	0·25	163·15	163·40
10. BODI'KANUR	0·27	22·52	22·79	28. Vayittiri ...	0·32	184·87	185·19
11. COCHIN	2·48	118·34	120·82	29. Manantoddi.	...	105·20	105·20
12. Mooply Valley.	...	129·57	129·57	30. Billigiris ...	1·01	48·95	49·96
13. Pachaimalai.	0·15	122·95	123·10	31. Sidapur ...	...	74·44	74·44
14. Mudis ...	N.R.	231·25	N.R.	32. Pollibetta ...	0·37	96·92	97·29
15. Nell'pathy...	0·35	99·01	99·36	33. Somwarpett.	...	70·56	70·56
16. POLLACHIE.	1·10	30·22	31·32	34. Ballupete ...	...	65·47	65·47
17. Manjeri ...	0·84	135·41	136·25	35. MANGALORE	0·68	114·02	114·70
18. Nilambur ...	0·80	117·94	118·74	36. MADRAS ...	1·95	27·26	29·21

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, November 18, 1926)

(A) EXCHANGE

The latest news cabled from England regarding the Coal Dispute is more satisfactory, but the Strike is not yet over, and it is probably the most serious factor against any revival of trade at the present time. The further hindrance is the lack of Steamer Space, and is making it increasingly difficult to put through the small amount of Export business that would otherwise be possible. A few Bills appeared earlier in the week, and on the very slightly harder rates resulting. Bullion enquiry appeared. At the moment Bills have disappeared altogether, and there has been some Forward enquiry for remittance which has weakened rates. The market is stagnant, and the immediate future is one of uncertainty. The propaganda for the 16*d.* Rupee which has already spread from Bombay to Calcutta is said to be threatening Madras. We do not think there is any very strong opinion here as to the relative merits of the 16*d.* and 18*d.* Rupee each ratio having its following. The best rates quoted to-day are as follows :—Banks selling T. T. on London 1*s.* 5 25/32*d.* November, 1*s.* 5 13/16*d.* first half and 1*s.* 5 27/32*d.* second half December, 1*s.* 5 7/8*d.* January ; 1*s.* 5 29/32 *d.* February/March, 1*s.* 5 7/8*d.* April, 1*s.* 5 27/32*d.* May and 1*s.* 5 13/16*d.* June to September. There are buyers of three months Credits at 1*s.* 6 1/8*d.* for November, 1*s.* 6 5/32*d.* December, 1*s.* 6 3/16*d.* January ; 1*s.* 6 7/32*d.* February/March and 1*s.* 6 3/16*d.* April. The Franc which was quoted 150 has improved very considerably to 141 3/4 per pound. The London New York rate has moved in favour of Sterling from 4.84 11/16 to 4.85 1/8.

(B) MONEY

Money.—Although the demand is still not appreciable, there is just a little more enquiry. The rates are more or less nominal, but we do not think Call money is available to-day at under 2 per cent. The quotation for three months is 2 per cent, six months 3 per cent and twelve months 4 per cent. Short deposits are still not wanted, but we expect there will be some demand for these very shortly. The Imperial Bank rate is again unchanged at 4 per cent and the percentage is 43.38 against 42.75 last week.

IV. Selected Madras Market Quotations

For the week ending Wednesday, November 17, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10¾
Bank of Mysore Rs. 100	165	...
Indian Banks (Rs. 100) Rs. 50	65	66
Indian Banks (Rs. 100) Rs. 10	13¼	13½
Central Bank (Rs. 50) Rs. 25	28½	29½
Imperial Bank of India (Rs. 500)	1500	1515
" " " (Rs. 125)	375	380
Chartered Bank £5	£ 19-15-0	£ 20-15-0
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 30-5-0	£ 31-15-0
" " (£25-B) £12½	£ 30-5-0	£ 31-15-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-10-0
P. and O. Bank £10	£ 10-15-0	£ 11-5-0
MILLS		
Bangalore W. C. and S. Ordy. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	93	97
Buckingham and Carnatic Ordy. Rs. 100	...	197½
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	122	123½
Coimbatore Rs. 100	150	160
Coimbatore Malls Rs. 85	...	85
Gokaks Rs. 100	105	...
Maduras Rs. 100	415	...
INDUSTRIALS		
Deccan Sugar Ordy. Rs. 500	885	925
Deccan Sugar 7 per cent. Cum Prefs. Rs. 100	107½	110
E. I. Distilleries and Sugar Factories Ordy. £0-16-0	15s.	17s.
E.I D. 7 per cent. Cum Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	63 c.D.	65 c.D.
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9 x.D.	9¾ x.D.
W. E. Smith Ordy. Rs. 100	47	51
W. E. Smith 6 per cent. Prefs. Rs. 100	85	87
Spencers Ordy. Rs. 100	150	155 c.D.
Spencers 6 per cent. Prefs. Rs. 100	97	100
Spencers 7½ per cent. 2nd Prefs. Rs. 100	115	120
Tata Iron and Steel Ordy. Rs. 75	60	65
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	73	77
United Breweries Ordy. Rs. 75	132½	135
United Breweries 6 per cent. Prefs. Rs. 100	90	95
PLANTING		
Cochins Rs. 15	55	60
Eddivannas Rs. 15	29½ x.D.	31 x.D.
Kalasas (Rs. 15) Rs. 9	8½	9½
Kinalurs Rs. 10	32½ x.D.	34 x.D.
Kuttiadis Rs. 15	19½	20
Malankaras Rs. 30	115 c.D.	117 c.D.
Peermades Ordy. Rs. 10	28 x.D.	28½ x.D.
Peria Karamalais Rs. 15	48	50 c.D.
Periasholas Rs. 10	7¼	7½
Periyars Rs. 10	22	24
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	4½
Thodapuzhas Rs. 10	33	35 c.D.
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22½	22 c.D.	22½ c.D.
United Nilgiris Rs. 100	115	117½
Vellamalais (Rs. 15) Rs. 13	16	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, NO. 48] SAT., NOVEMBER 27, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	803	Letter to the Editor—	
The Rupee Exchange ...	804	The U.P.A.S.C. Meet ...	813
Personalia ...	805	South Wynaad District Notes...	814
District Association Meetings—		Exports of Coffee, Rubber and	
A. Nelliampathy ...	806	Tea ...	816
B. Kanan Devan ...	808	Commercial and Meteorological.	817
C. South Travancore ...	811		

EDITORIAL NOTES

We apologise to all concerned and to Mr. Hawkins in particular for a moment of mental aberration which led us quite unwarrantedly to place 'President' underneath Mr. Hawkin's name at the foot of the letter on 'Representative Planting Teams' which he contributed to our issue last week. In doing so, we unfortunately entirely overlooked the fact that, at the Annual Meeting held at Ootacamund on February 23, 1926, Mr. B. M. Behr was elected President of the Club for the year 1926-27.

As indicated in their advertisement on page xviii, the Office of the Agricultural Service Bureau for Calcium Cyanamide has been transferred from 'The Mercantile Bank Buildings, Madras' to 'The Oriental Buildings, St. Mark's Road, Bangalore'; to which address all correspondence intended for the Agricultural Officer should henceforth be sent.

We venture to remind our Readers that Christmas greetings to friends at Home should be posted so as to catch the mail which is to be despatched from the General Post Office at 6 p.m. on Thursday next. The Outgoing Mail of the following Thursday is not due in London until December 26, but will of course be delivered in ample time to send friends in even the most remote parts of the Kingdom greetings for the New Year.

With regard to their own prospective arrangements for Xmas, our Readers will have doubtless noticed that both the Madras and Southern Mahratta Railway Co., Ltd., and the South Indian Railway Co., Ltd., are issuing from the 14th prox. First and Second Class Return Tickets, available for the Outward journey until the 31st idem, and for the Homeward journey from the 14th prox. until the 14th January, at one and one-third Single Fares; with the proviso that for distances of a hundred miles or less each way the fare prescribed for 101 miles must be paid.

It is very encouraging to note from the cable reproduced on Page 817 that 'A' quality South Indian coffee is quoted at 165s. in London, and that the market is reported to be firm.

The Coffee
Market

THE RUPEE EXCHANGE

During the past week Reuter has announced that the Secretary of State in Council, with the concurrence of the Government of India, has decided to introduce a measure at the forthcoming Delhi Session of the Indian Legislature so as to implement in broad outline the recommendations made in the Hilton Young Commission's report. This decision presumably involves the formal abolition of the 24*d. de jure* rate of exchange which has obtained since 1920; and the adoption of the present *de facto* rate of 18*d.*, in preference to the lower one of 16*d.* which is advocated by many influential bodies and individuals such as the Indian Merchants' Chamber, The Bombay Chamber of Commerce, Sir Purushotamdas Thakurdas, and Sir Victor Sassoon.

That the controversy between these two rates was not made an issue in the recent General Elections is significantly indicative of the fact that the cleavage it occasions in no way coincides with party divisions; since Government Supporters, Swarajists, and Independents are to be found in both camps. The real division is between Exporters and Importers, or Creditors and Debtors; and, though *prima facie*, the uninitiated might be excused for feeling that the lower rate would be more advantageous to India with its favourable balance of trade; yet we must admit that, judging by recent experience, the higher rate seems to be quite compatible under present conditions with the economic law of Supply and Demand, since we have seen no evidence that the 18*d.* rate is an artificially high one which Government has maintained by redeeming securities with money taken from the Paper Currency Reserve.

We have no doubt that the Planting Section, at any rate, of Agriculturists in India will be satisfied that the findings of the Royal Currency Commission, though possibly ill founded, were nevertheless reached in a *bona fide* attempt to subserve the economic interests of India as a whole; and will therefore, until an opportunity for obtaining constitutional redress presents itself, shoulder as cheerfully as possible the extra burden which the 18*d.* ratio imposes on it in the interest of the importer in particular, and of the tax payer in general who benefits by the reduction in the Government remittances necessary to meet 'Home Charges' and the interest on foreign loans.

In this connection, some rough indication of the extent of that burden may not be altogether inopportune; and so we place it on record that Mr. Robert Williamson, presiding at the Annual Meeting at the Chubwa Tea Co., said that the increase in their expenditure was 'largely due to the higher rates of exchange which we had to pay throughout the year for our purchases of rupees in Calcutta. The average rate for the year was 1*s.* 6 $\frac{1}{16}$ *d.*, as against 1*s.* 5 $\frac{5}{64}$ *d.* in 1924, costing us an additional £5,066 13*s.* 4*d.* which represents .49*d.* per lb. of the .63*d.* per lb. increase in cost of production, and it is well to point out that this increase followed on an extra cost of about £4,700 in 1924 over that of 1923, so that increased rates of exchange have cost us this year close on £10,000 additional as compared with 1923.'

Another authority, the Chairman at the Thirteenth Annual Meeting of the Singlo Tea Company spoke in the following very similar terms:— 'Exchange is an item which considerably affects our results. In 1923 our remittances to India for garden outlay were made at an average rate of 1*s.* 4 $\frac{3}{16}$ *d.*; whereas in 1924 the average was 1*s.* 5 $\frac{7}{32}$ *d.*, or a difference of $\frac{1}{32}$ *d.* per rupee. That this a serious item you will readily understand when I tell you that this rise in the rupee cost us £8,272 in 1924, which is

equal to about $\frac{1}{2}d.$ per lb., on the crop ; and had exchange been the same as in 1923, our results would have been better than that year. There has since been a further rise in exchange, and the rupee is now a little over 1s. 6d. I am glad to say that we have sent out a good deal of money towards our 1925 expenditure at below 1s. 6d., but it is quite clear that 1925 will have to shoulder the burden of a higher exchange than 1924.'

PERSONALIA

BIRTH

IRELAND-JONES :—On November 17, 1926, to Mr. and Mrs. J. H. Ireland-Jones of Stanmore Group, Valparai P.O., a daughter.

MARRIAGE

PETRIE-MIDDLETON :—On Wednesday, November 17, 1926, at the Scot's Kirk, Colombo, by the Rev. C. V. A. MacEchern ; George Angus McAllan Petrie, Alleppey, Travancore, to Annie Brown Middleton, Oldmeldrum, Aberdeenshire.

DEATH

CLODE :—At the Mysore Hospital, on November 18, 1926, Mr. C. W. Clode of Netley Estate, Suntikoppa, Coorg.

ON THE SICK LIST

Our Readers will regret to learn that Mr. C. GOLDIE TAUBMAN has entered the Willingdon Nursing Home owing to an attack of Pleurisy ; and that MRS. C. GOLDIE TAUBMAN, who, though convalescent, still requires a certain amount of medical attention, has consequently re-entered the Home.

ARRIVALS

MR. S. BAYLY has arrived from Home on a visit to the Nilgiris where, as many of our Readers know, he formerly resided for several years.

MR. and MRS. W. A. J. MILNER of Peermade arrived from Home this week.

MESSRS. R. P. N. SWAYNE and E. C. SHEWARD have also returned from furlough to, respectively, Panora Estate and Achoor Estate in the Wynaad.

MR. L. C. OLIVER sailed for India by the S. S. *Shropshire* on the 5th instant, and should, therefore, reach Kartikerri Estate, Attikan P. O., Mysore District, early next month.

DEPARTURE

Our Readers will regret to learn that Mr. and Mrs. NICOLLS, who had hoped to sail this week from England, have been compelled to postpone their departure owing to the illness of Mrs. NICOLLS, who however we are glad to learn is now convalescent.

OTHER PLANTING NEWS

MR. R. J. McMULLIN of Vandiperiyar passed through Madras this week on his way to Tocklai for an Instructional Course on Tea.

CORRIGENDUM

We regret that the Printer's Devil devilled our 'Messrs. R. S. Keir and E. W. Simcock' into 'Mrs. R. S. Keir and E. W. Simcock' in 'OTHER PLANTING NEWS' last week.

DISTRICT ASSOCIATION MEETINGS

A. NELLIAMPATHY PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of a General Meeting held at Lily Bungalow at 1.30 p.m., on
Sunday, November 14, 1926

Present

Messrs. H. D. Chaldecott (*Chairman*), A. Hall, J. W. Stevenage, H. A. Boas and A. P. Kinloch (*Honorary Secretary*).

The Honorary Secretary read the notice call the Meeting.

The Minutes of the last Extraordinary General Meeting held at Seetagundy Bungalow on June 13, 1926, were taken as read and confirmed.

1. Proposed from the Chair and seconded by Mr. H. A. Boas that the Honorary Secretary be instructed to re-draft Labour Rule No. 1. *Carried.*

2. Proposed by Mr. A. P. Kinloch and seconded by Mr. J. W. Stevenage that the remaining rules drafted by the Committee be adopted. *Carried.*

3. Proposed by Mr. A. Hall and seconded by Mr. H. A. Boas that a committee composed of the Manager of Shernelly Estate and Messrs. A. P. Kinloch and J. W. Stevenage be formed to draft schedule of District rates for building and road works, to be put before a general meeting. *Carried.*

4. Proposed by Mr. A. Hall and seconded by Mr. A. P. Kinloch that the Honorary Secretary be instructed to ascertain from the Dewan of Cochin when the work of making the Ghat Road fit for cart traffic will be taken in hand as per his promise made during his late visit to these Hills. *Carried.*

5. Proposed by Mr. A. Hall and seconded by Mr. H. A. Boas that the Honorary Secretary be instructed to ask the Secretary, U.P.A.S.I. whether any reply has been received from the Cochin Durbar in regard to the resolution passed at the last Bangalore Meeting with reference to rent asked for by the Cochin Durbar for lands they propose to lease for planting purposes. *Carried.*

6. The following report of Mr. Arthur Hall, Delegate to the Bangalore U.P.A.S.I. Meeting held during the month of August 1926, was recorded:—

Menmani Road.—I thought of asking the Meeting to assist us in the matter, but on conferring privately with the Chairman and some of the Delegates, was strongly advised not to put forward a resolution on the matter. In fact it was considered that we had progressed very well for the short time the matter had been taken up. In three months we have had, by no means hopeless replies from the authorities and we may say the question has been reduced, for us, to one of Rs. 2,000 the Madras Government now asking whether the District Board and ourselves are prepared to find half the cost of Rs. 8,000.

I suggest we keep up the correspondence without a break. In my opinion, it would, I think, be a sound thing to reply to the Madras Government (with a copy to the District Board) protesting that they have missed our point, which is that we *have already paid* a very considerable sum for which no benefits have been obtained. Further that if the Planters are asked to pay, it would only be right to ask the land-owners and or ryots alongside the road to subscribe a much larger proportion; since it is obvious their land is of far greater area than land cultivated, or possible of being cultivated, in British Nelliampathies. Another fact we might draw their attention to is that the road above the Nenmani Road (that is the road for the benefit of Hill-traffic) has been made and maintained entirely by Messrs. James Finlay & Company, Limited who are now

preparing to spend even larger sums on it. Also do not the Government propose asking the Taluq Board to pay anything? We ought also, I think, to write the Taluq Board and ask them for details of their estimate for Rs. 8,000 for metalling the above road; for we cannot even consider paying out money unless we know how it is proposed to disburse any sums we subscribe, and until we learn exactly what we may expect in return for same.

I express these personal suggestions for what they are worth hoping they may help to press forward the matter. The U.P.A.S.I. do not care about taking up local matters until the Association concerned has first made every effort to obtain satisfaction.

Political Representation.—As you will gather from Press Reports the Meeting was strongly in favour of this, so I gladly remained silent. This matter is also wrapped up with the question of refuting allegations in the press and other places against the Planter and his treatment of labour on estates. In this connection a resolution was passed to the effect that the Government official responsible for the welfare of Labourers (the Commissioner of Labour, if I remember rightly) be invited to visit, not only estates in British India, but also those in Native States and satisfy himself as to the facts.

I could learn nothing of work on the Pollachi-Palghat Railway and suggest our Association writes and asks for information from the Authorities direct.

Roll of Honour.—I protested against this being in a denominational building, but the Meeting was almost entirely of another opinion, only one delegate besides myself, voting against the resolution.

Spraying of Coffee.—I obtained what information I could. Captain Travers Drapes was of opinion that in the Shevaroyes—where of course climatic conditions are far better for the work than here—spraying is of tremendous benefit. His estimate of cost from practical spraying of some areas, was under Rs. 10, but I cannot believe from my own trials that we can hope to do it at anything like this figure. Although I think we can safely conclude that spraying is of great benefit against 'Leaf-disease' we seem yet a long way from reducing the job to one of routine work and the only way to arrive at this end is, I think, by practical experiments on small scales with (1) sprayers of various patterns and (2) various mixtures. I think the former is the most important at present and our Scientific Officers will solve the latter better than we can. In regard to solutions, Burgundy mixture (Copper sulphate and washing soda) is, I understand, being tried at present.

As to the important point of sprayers—neither of the two makes which have been Experimented with are satisfactory; the chief reason being that one pumping is not sufficient to maintain the air-pressure at a proper level as solution becomes discharged, resulting in the liquid being discharged in the form of rain, rather than of mist, which means large and unnecessary waste. I gather it is quite practical to spray at any season so long as the solution has time not only to dry but for the necessary chemical action (which I don't pretend to understand) to take place; though obviously the season when the greatest number of leaves can be protected, is best.

A 4-4-50 solution, with adhesive added, seems the usual strength used at present.

A. HALL, *Delegate to Bangalore.*

7. Proposed a hearty vote of thanks to Mr. J. W. Stevenage for the use of his bungalow.

A. P. KINLOCH,
Honorary Secretary.

H. D. CHALDECOTT,
Chairman.

B. KANAN DEVAN PLANTERS' ASSOCIATION

(INCORPORATED)

Proceedings of the Bi-Annual General Meeting held at High Range Club,
Munnar, on Saturday, October 16, 1926, at 2 p.m.

Present

Messrs. Albert J. Wright (*Chairman*), R. B. Cullen, G. A. Holden, H. L. Pinches, J. M. Bridgman, M. C. Koechlin, G. L. Jack, J. Gray, C. K. Olney, J. W. Tolson, E. E. Ranicar, H. G. Marshall, J. S. Hawkins, A. H. Dixon, A. Yates, W. J. Dixon, H. Kirby, and H. J. Watson (*Honorary Secretary*).

Visitors

Messrs. B. H. Mathews, R. J. M. Duncan, J. Paterson, J. A. Nicolson, H. O. Thomas, J. C. B. Craske, and D. Rees.

The notice calling the Meeting was duly read. The Minutes of the Bi-Annual Meeting held on November 23, 1925, having been printed and circulated, were taken as read and confirmed.

The following Agenda was laid on the table :—

- (1) Delegates' Report on U. P. A. S. I. Annual General Meeting.
- (2) Labour Controls.
- (3) U. P. A. S. I. Sports Club.
- (4) Any other business of which due notice has been given.

(1) The Chairman called on the Honorary Secretary to read the following Report of the Delegates to the U. P. A. S. I. Annual General Meeting :—

September 15, 1926.

' TO THE HONORARY SECRETARY,

' KANAN DEVAN PLANTERS' ASSOCIATION.

' DEAR SIR,

' As Delegates from your Association, we have pleasure in submitting the following Report upon our attendance at the Thirty-third Annual General Meeting of the United Planters' Association, South India, held at Bangalore on the 23rd ultimo, and following days.

' With regard to the subjects upon which we received instructions from your Association, we have to report as follows :—

' *U. P. A. S. I. Sports Club.*—Our proposal that the venue of Planters' Week in 1927 be decided by the Members of the Upasi Sports Club was lost, and it was decided to hold it in Ooty in the second half of February. An interesting suggestion put forward, that Bangalore in July or August be considered as a venue for the meet was received very favourably ; and it seems to be very likely indeed that it will be tried in 1928. The time would suit all the varied interests concerned much better than the earlier months of the year.

' *Toll Gates in South India.*—A resolution from the Chair led to the appointment of a Sub-Committee to consider the establishment of a Road Fund in India. When their Report was presented it embodied the proposals for the abolition of Tolls upon motor vehicles. In view of this we withdrew our resolution on the subject as being superfluous. We proposed the comprehensive resolution drafted by the Sub-Committee to express their recommendations which was seconded by the Nilgiri Delegates and carried. It is to be hoped that this matter will receive the attention it deserves from the Government of India, at a very early date.

' *Labour Rules and By-Laws, etc.*—After a very considerable amount of discussion your Delegates succeeded in getting the following resolution passed :—" That the Executive Committee be requested to pass a Rule

‘imposing a penalty in the event of an appeal which they consider to be frivolous being made to them under Rule III.’ This was seconded by the Central Travancore Delegates.

‘The trend of the discussion was that the amount in dispute should be deposited together with a fee of Rs. 50 or Rs. 100 which might be forfeited. As the resolution stands the matter rests with the Executive Committee for consideration.

‘Your Delegates seconded the Central Travancore resolution regarding the provision of a book of Standing Instructions for the Labour Department, which emanated from the Srivilliputtur Control Committee. This resolution was carried.

‘They also proposed a resolution authorizing the Association to subscribe to the L.A.N.I. and S.I.N.A. on behalf of its European Employees, which was seconded by the Nilgiri-Wynaad delegate and carried. This is intended to help towards the medical aid provision in the new Rules of employment, etc., which were finally adopted at the Meeting.

‘*Pilferage of Estate Produce and Goods.*—Your delegates seconded a resolution proposed by Mr. W. K. M. Langley of Messrs. Peirce, Leslie & Co., Ltd., to the effect that the Government of Madras be urged to introduce the Madras Pilferage Prevention Act of 1924 at the earliest possible moment; and to extend its provisions, when passed, to a number of Coast Ports, including Tuticorin with which this Association is intimately concerned. The resolution was carried. As the produce of this District has suffered considerably, let us hope that this effort will bear early fruit.

‘*Roll of Honour.*—This subject produced great discussion and a wide diversity of views; but eventually the Anamallais resolution was carried. This was influenced to a considerable extent, by the very cordial reception accorded to the proposal by the Chaplain of St. Stephen's Church, Ootacamund. Your Delegates supported the resolution.

‘*Scientific Department.*—Your Delegates seconded the proposal made by the Anamallais Association that the amended scheme for the Tea Scientific Department come into force as from the commencement of the financial year, and that an Assistant for Dr. Shaw be engaged at once. This resolution was carried and it was understood that a suitable candidate for the proposed appointment is in view. It should be noted that this leaves a considerable margin of funds available for the tea section of this Department; but Mr. P. H. Carpenter thought it most desirable to advance cautiously and, in deference to his opinion, any further appointment to the Staff will be delayed for a time.

‘We also seconded a resolution proposed from the same source thanking Mr. R. M. Nicolls for all the work he has done for the Department in supervising the buildings, etc., at the new station and voting a sum of Rs. 500 from the funds of the Department for the purpose of presenting him with a piece of plate in appreciation of his services. It was stated that the excellent progress made with the work was due entirely to his unremitting efforts.

‘The Rubber proposals of the Executive Committee were adopted; but, as regards Coffee, the position will be unsettled until the intentions of the Mysore Durbar are announced in the matter of a successor to Dr. Leslie Coleman as Director of Agriculture.

‘*Political Representation.*—The Resolution proposed by the Mundakayam Association disclosed an attempt to get U.P.A.S.I. to withdraw from the scheme for a salaried Political Representative; but the discussion produced such strong opposition to the proposal that it was withdrawn.

'European Employees' Provident Fund.—As instructed your Delegates put forward the suggestion to limit the benefits under Rule 16 to 100 per cent as in the case of the other Rules relating to bonuses. It was pointed out however, that this Rule gave the Executive Committee power to disburse any surplus funds and that the limitation proposed might place them in the invidious position of having funds at their disposal which they could not utilize in any possible way. In view of this explanation we decided to withdraw the proposal.

Before closing this Report, it is perhaps desirable to draw attention to a resolution inviting the Commissioner of Labour to enquire into the conditions of Labour on Estates. This was the outcome of a lengthy discussion as to the best means of controverting the unsubstantiated statements regarding these conditions which have recently appeared in the Press. It was generally felt that it would be necessary to set our house in order in this direction. While we feel sure that this District has nothing to fear from comparisons; there is one point which impressed itself upon your Delegates, which is the outcry against overcrowding in lines and the resultant lack of privacy for family labourers.

We trust that our efforts will meet with the approval of your Association. We shall be glad to amplify any of the items touched upon if further information is desired or to afford it so far as it is in our power to do so, upon any of the other subjects which were dealt with at the meeting.

Yours faithfully,
ALBERT J. WRIGHT,
J. S. HAWKINS.

At the suggestion of Mr. H. L. Pinches it was resolved that certain passages of the Report be not published with these Minutes when submitted to the *Planters' Chronicle*. Mr. W. J. Dixon asked for information from the Delegates *re* the new scheme of I.A.R.O. which Colonel Walsh had explained at Bangalore. Mr. Wright replied fully to Mr. Dixon's enquiry.

A hearty vote of thanks was accorded to the Delegates Messrs. Wright and Hawkins for representing the Association.

(2) *Labour Controls.*—The Chairman invited Members to ask any questions from Control Members on Labour matters; but no member had anything to bring up.

(3) *U. P. A. S. I. Sports Club.*—A lengthy discussion took place in Committee *re* choosing of teams for various sports, etc.; and the outcome was the following Resolution proposed by Mr. H. J. Watson and seconded by Mr. A. H. Dixon:—

'That the following Committee consisting of Messrs. Hawkins, W. J. Dixon, Pinches and Laird be elected to choose all representatives asked from this District for U. P. A. S. I. teams; and to choose all teams for Inter District Competitions, that such Committee have full power to decide training and all details, and that they have power to add to their number,' which was carried unanimously.

The Chairman intimated that Mr. T. H. Cameron, District Commissioner, had applied for Personal Membership of the Association; and that he felt sure there was no need to pass round ballot papers. On a show of hands Mr. Cameron was unanimously declared a Personal Member of the Association.

With a vote of thanks to the Chair the Meeting terminated.

H. JOHN WATSON,
Honorary Secretary.

ALBERT J. WRIGHT,
Chairman.

C. SOUTH TRAVANCORE PLANTERS' ASSOCIATION (INCORPORATED)

Minutes of the Third Quarterly Meeting held at the Quilon Club, Quilon, on Saturday, November 6, at 10 a.m.

Present

Messrs. T. L. Jackson (*Chairman*), R. Branson, J. R. N. Pryde, R. N. W. Jodrell, A. P. D. Lodge, R. F. H. Crowther, L. J. T. Polgreen and F. G. Millar (*Honorary Secretary*). *Visitor*: P. Y. Champion.

Letters expressing regret at their inability to attend were read from Messrs. E. T. C. Farr, T. P. M. Alexander and H. Lindsay.

AGENDA

1. Honorary Secretary read Notice calling the Meeting.
2. Minutes of Quarterly Meeting of August 14, 1926, having been published in the *Planters' Chronicle*, were taken as read and confirmed.
3. *Personal Members*.—Proposed from the Chair that Mr. T. P. M. Alexander representing Shaliacary Estate, and Mr. H. Lindsay representing Perinad Estate be elected Personal Members of the Association.

Carried.

4. *Report of Delegates to U. P. A. S. I. Meeting, Bangalore, in August 1926*.—The Delegates, Messrs. T. L. Jackson and F. G. Millar, said that, in view of the fact that the Proceedings of the Meeting in Bangalore had been fully reported in the *Madras Mail*, and the *Planters' Chronicle* of August 28, and that the Book of Proceedings had been circulated to all members, they did not propose placing a detailed report before the Meeting; but they were prepared to answer, as far as possible, any questions that members might care to raise.

Mr. Lodge enquired with regard to the proposed Road Fund in India, and how it would affect Travancore. After the matter had been discussed Mr. Pryde spoke at length with regard to the new Tea Experiment Station at Nellakotta. He said he had recently had an opportunity of visiting the Station and was impressed with the fact that when the present available land was occupied by present and future buildings there would be very little land available for tea. He was of the opinion that, if possible, further land should be acquired so that a reasonable area of tea, for experimental purposes, should be under the control of the Scientific Officer.

A considerable amount of discussion followed and after the Delegates had given their views the following resolution was put forward. Proposed by Mr. Pryde and seconded by Mr. Lodge, 'That the U. P. A. S. I. be asked to consider acquiring a further block of land for addition to the Nellakotta Tea Experimental Station, in view of the fact that much of the existing area is unsuitable for experimental purposes.'

Carried.

Proposed by Mr. Jodrell and seconded by Mr. Branson that a hearty vote of thanks be accorded to the Delegates for their services; and that their expenses amounting to Rs. 323-12-0 and Rs. 329-12-0 be passed for payment.

Carried.

5. *Election of Delegate to Sri Mulam Assembly*.—The Honorary Secretary intimated that Mr. E. T. C. Farr had kindly offered to represent the Association; and the Chairman, in acknowledging the Association's indebtedness to Mr. Farr for his past services at the Sri Mulam, proposed that Mr. Farr be elected as the Association's Delegate.

Carried.

6. *Subjects for Sri Mulam.*—The matter was discussed and the members appeared to think that the delay in obtaining registration and license for moter vehicles in Trivandrum might be a suitable subject for representation. The drafting of a suitable Memorandum was left in the hands of the Chairman; while, for a second subject, it was left to Mr. Farr to bring up the matter of the condition of the Punalur-Vadaserikara road if he cared to do so.

7. *Planting Member, Travancore Legislative Council.*—The Honorary Secretary intimated that as Mr. J. B. Cook had resigned it would be necessary to have another election. He understood that the Kannan Devan P.A. had asked Mr. L. A. Lampard to stand; while the Mundakayam P. A. had put forward Mr. J. J. Murphy as their nominee. It was resolved to support Mr. L. A. Lampard's candidature and the Honorary Secretary was instructed, as time was short, to send forward Mr. Lampard's Nomination papers and deposit of Rs. 250 to the Commissioner, Devicelam.

8. *R. G. A., South Indian Branch.*—Correspondence in regard to 'Packing of Rubber' forwarded by Secretary, R. G. A. Committee, South India, was read. The Meeting was of opinion that the suggested special clausing in the Bill of Lading was unnecessary and unjustified; but as it was understood that the R. G. A., London, were taking up the matter with the steamship owners it was decided to leave the matter in abeyance for the time being.

Steamer Freight on Rubber.—Read letter, dated October 26, 1926, from Secretary, R.G.A., Cochin, with regard to the high rates ruling for produce from ports on the Malabar Coast to London compared with these current from Bombay and Colombo.

Proposed by Mr. Jodrell and seconded by Mr. Crowther.

'That this Association protests against the inequality of steamer freight rates at present ruling from ports on the Malabar Coast to London in comparison with those offering in Bombay and Colombo; and trusts that the Cochin Chamber of Commerce will be able to approach the owners with a request that freight on rubber be reconsidered and revised on a more equitable basis.'

Carried.

9. *Reduction of Advances.*—Letter, dated August 27, 1926, from Secretary, U.P.A.S.I. This subject was discussed; and the members were of the opinion that it was desirable that advances to labour be reduced. It was suggested that the U.P.A.S.I., Labour Department, who are in close touch with this matter, might give an indication of what they consider reasonable advances for each District.

10. *Memorial Tablet, South Travancore Area.*—The Honorary Secretary explained what had so far been done in regard to having a Memorial Plate erected in the Quilon Church to those Planters from the South Travancore, who fell in the Great War. The following Committee were elected to assist in the form and wording of the Memorial: Messrs. Alexander, Polgreen and Millar.

11. *Correspondence.*—Letter No. 5528 dated October 7, 1926, from Secretary, U.P.A.S.I., with reference to 'Stamp Duty on Cooly Contracts'.

Recorded.

Letter No. 5716, dated October 12, 1926, from Secretary, U.P.A.S.I., in regard to 'Reduction from Wages or Payments in respect of Fines.'

Recorded.

Letter, dated August 25, 1926, from Honorary Secretary, Travancore, combined, Planters' Association with reference to 'Income Tax on Leave Pay'. It was decided to leave the matter in the hands of Honorary Secretary.

T.C.P.A. to enable him to take the matter up with the Planting Member, Travancore Legislative Council if considered necessary.

Letter dated October 28, 1926, from Honorary Secretary, West Coast Planters' Association in regard to protesting against the principle of transferring to the General Funds of the U.P.A.S.I. sums subscribed for a particular subject such as the upkeep of the Rubber Mycologist's Station. The Meeting was in agreement with the views expressed by the West Coast P.A.

With a vote of thanks to the chair the Meeting terminated.

F. G. MILLAR,
Honorary Secretary.

THOS. L. JACKSON,
Chairman.

LETTER TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' views.)

The U.P.A.S.C. Annual Meet

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

Before writing his letter of the 4th inst., Mr. Newcome might have taken the trouble to find out what the Conference was discussing at the time. Mr. Fulcher's introduction of the subject of the Sports Club was very clear. As he said, we only had to discuss the venue of the Meet; and whether it should be held in February or March. With reference to the latter, his exact words, according to the Book of Proceedings, were:— 'It was originally agreed that the date should be fixed to suit coffee men and rubber men in alternate years. February for Rubber men and March for Coffee men. . . . These are the questions you have to decide.' In the remarks I had to make I only touched on the above two subjects: (1) the venue of the Meet and (2) whether it should be held in February or March; and with regard to the latter I quite truly said that Mr. Newcome had said that 'February was the most suitable month for coffee.' If in these circumstances verifications are necessary, I would refer him to (1) his letter to you of the 4th inst., (2) Mr. Raymond's remark on page 73 of the Book of Proceedings, 1926, and (3) his own remark on page 107 of the Book of Proceedings, 1925. The question at the time before the meeting was merely whether February or March was the most suitable month. I should certainly never suggest that any coffee planter would consider February to be the best month in the whole year for coffee planters.

I am in entire agreement with what Mr. Newcome has to say in the last para of his letter; and it may be of some little interest to him to know that after the Conference last August I have done my best to get the venue of the Meet of 1927 changed from Ooty in February to Bangalore in August, immediately after the Conference, but without success. I am of opinion that a change in venue will prove to be the solution of our difficulties; but as it appears to be an impossibility in 1927, I think it is now for us to make the Ooty Week next February as successful as possible.

Yours, etc.,
STUART HAWKINS.

November 19, 1926.

U.P.A.S.I. SPORTS CLUB

At the Annual General Meeting of the U.P.A.S.I. at Bangalore last August, certain matters connected with the Club were raised, and referred to the Sports Committee for consideration.

The opinions of the Committee after consideration are as under :—

SPORTS MEETING in Bangalore 1928 either in conjunction with or following the Business Meeting—in favour. Southern Districts member advocates that Bangalore be not chosen as the venue oftener than once every three years ; on account of the distance to be travelled by his members. The month of October is considered unsuitable for the majority of tea members ; as being the heaviest cropping month in several districts.

CRICKET MATCH with WEST COAST Europeans combined team during Planters Week—in favour.

SMALL PROPRIETORS' SUBSCRIPTION TO CLUB—The Committee is in favour of allowing a reduced annual subscription to Proprietors with 100 acres or less of cultivation in one or more districts, and proposes that the subscription for such members be reduced from Rs. 25 to Rs. 15. Under the rules of the Club a resolution to this effect will be prepared for sanction or otherwise at the next General Committee Meeting of the U.P.A.S.I.

DEVARASHOLA,
November 14, 1926.

G. W. FULCHER,
Honorary Secretary.

DISTRICT NOTES

South Wynaad

Armistice Day was observed in this district by a well-attended gathering. Twenty-eight members were present. Mrs. Powell and Mrs. Bisset were unavoidably absent through indisposition ; and the stalwarts from Pootoomulla played truant, but were reinstated in our good graces by sending in their donations to the Poppy Fund.

In the morning a service was held in Meppadi Church, Mr. H. C. Hammond as acting lay trustee officiating ; assisted by Mr. J. E. Bisset, who read the lessons, and Mrs. Hammond at the organ.

The sale of poppies was in the hands of wee Joan Hammond. With true business instinct she insisted on repeat orders and her stock was soon exhausted.

The party then separated for lunch as the guests of the local members.

An American tennis tournament was arranged for the afternoon ; and though not completed, was most successful, and provided a useful addition to the Poppy Fund in lieu of prizes.

Dinner was served at 8 p.m. ; and as usual was a triumph for the ladies, in whose hands the arrangements were placed.

The agitation of Mr. Behr during the day was somewhat marked, some detail in the programme having gone amiss; and it was only after the loyal toasts had been given that we were enlightened. A ham had been ordered for dinner, but its belated arrival nullified its usefulness. Mr. Behr suggested a raffle, and the proceeds given to the fund. Some facetious individual, seeing the already overburdened table, suggested he had kept it back on purpose. The raffle was held, and the lucky winner was Mr. Hay, who responded in the following manner:

'Tis proud that I am, to have won this ham
But I cannot possibly eat it,
So the ham must depart, and an auction I'll start
With ten chips, so see who can beat it !'

Now Boulton and Peachey with voices both screechy,
Determined that ham to acquire,
Persistently calling, or should I say bawling,
Eventually had their desire.

But would you believe it, they would not receive it,
Said Hay was a poor auctioneer.
Together united, the party invited
Again to bid up without fear.

Then Angus the midget, beginning to fidget,
Decided from sleep to awaken,
He bid a high price, and found in a trice
Himself the possessor of bacon.

Back again to the fray, that ham found its way,
Reluctant to pass from our vision,
Angus with his banter, said Gould in a canter,
Had taken it into possession.

Of ham and its fate, 'tis sad to relate,
The time was well on in pip emma,
That Gould with a grin said 'I'll hand it in
To the "Rifles"—to end our dilemma.'

Well, that ham eventually fetched Rs. 180. Some people may think that bacon at Rs. 13 a lb. an expensive luxury, but you should have seen Mr. Behr chuckling to himself the rest of the evening. This handsome addition enabled us to pass all previous records, and a cheque for over Rs. 500 will be the District's share to 'Earl Haig's Fund.'

Dancing followed, and the evening terminated with an impromptu sing-song, with Mr. Finlayson as the star performer and choirmaster. They do say he has missed his vocation?

YOUR SPECIAL CORRESPONDENT.

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING SEPTEMBER, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	467	...	115	...	...	...	...	60
Calicut	...	...	581	...	...	...	150	...
Mangalore	204	...	...	5,631	2	30	...	...
Tellicherry	...	...	...	1,372	...	...	...	...
Bombay	...	...	...	...	22	...	...	...
Total	671	...	696	7,003	24	30	150	60
Previously	11,753	...	26,375	32,199	23,093	12	101	7,467
Total cwts. since 1-1-26.	12,424	...	27,071	39,202	23,117	42	251	7,527
<i>Rubber—</i>								
Calicut	...	144,318	88,963	...	...	...	...	...
Cochin	...	119,698	170,900	30,285	...	...	291,384	...
Tellicherry	...	5,851	14,228	...	...	...	...	...
Tuticorin	...	130,693	...	...	...	...	...	...
Alleppey	...	334,518	20,290	...	...	...	...	19,262
Total	...	735,078	294,381	30,285	...	...	291,384	19,262
Previously	440	3,677,927	3,087,027	109,641	224	...	1,013,244	144,683
Total lbs. since 1-1-26.	440	4,413,005	3,381,408	139,926	224	...	1,304,628	163,945
<i>Tea—</i>								
Madras	18,960	...	121,003	225	100	...	...	300
Calicut	17,852	34,064	962,115	1,200	...	...	5,480	...
Cochin	23,017	9,440	579,498	...	...	...	...	...
Tellicherry	...	...	116,573	...	...	...	...	...
Tuticorin	...	239,475	663,621	...	...	...	...	...
Alleppey	...	48,903	87,525	...	...	...	...	...
Total	59,829	331,882	2,530,335	1,425	100	...	5,480	300
Previously	321,069	2,134,563	17,504,928	6,978	4,128	8,080	10,400	200
Total lbs. since 1-4-26.	380,898	2,466,445	20,035,263	8,403	4,228	8,080	15,880	500

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand:—

(a) Some of the higher London Prices—

Best prices realized on the London Market				Average prices obtained for tea			
Mark	Pkgs.	Price		District	Week ending Oct. 16, 1926	January 1 to Oct. 16, 1926	January 1 to Oct. 16, 1925
(A) TEA (WEEKS ENDING OCTOBER 16 & 23, 1926)					s. d.	s. d.	s. d.
(a) <i>Anamalais</i> —			d.	N. India.	1 7.12	1 8.21	1 5.07
Nullamudi ...	123	1	7	S. India	**1 6.18	††1 7.68	††1 5.25
Mukkottumudi ...	137	1	6 $\frac{3}{4}$	Ceylon...	1 7.79	1 8.42	1 7.64
Thayamudi ...	128	1	6 $\frac{1}{2}$	Java ...	1 1.84	1 4.25	1 0.67
Periakaramalai ...	241	1	5 $\frac{3}{4}$	Sumatra.	Nil.	1 4.95	1 4.17
High Forest ...	166	1	5 $\frac{1}{4}$	Nyassa- land.	1 1.93	1 5.37	1 1.02
Selaliparai ...	86	1	5 $\frac{1}{4}$				
Kallyar ...	192	1	4 $\frac{3}{4}$	Total ...	*1 7.04	†1 7.77	†1 5.54
Karakundru ...	125	1	4 $\frac{3}{4}$				
(b) <i>Central Travancore</i>				District	Week ending Oct. 23, 1926	January 1 to Oct. 23, 1926	January 1 to Oct. 23, 1925
Stagbrook ...	146	1	5 $\frac{1}{4}$		s. d.	s. d.	s. d.
Twyford and Ashley.	172	1	5	N. India.	1 6.28	1 8.13	1 5.12
White Hills ...	143	1	5	S. India	a1 4.59	b1 7.50	c1 5.29
Koliekanum ...	108	1	5	Ceylon ...	1 7.76	1 8.41	1 7.68
Karimkolam ...	151	1	4 $\frac{3}{4}$	Java ...	1 1.80	1 4.25	1 0.68
Dymock ...	128	1	4 $\frac{3}{4}$	Sumatra.	Nil.	1 4.95	1 4.17
Caradygoody ...	100	1	4 $\frac{3}{4}$	Nyassa- land.	1 3.41	1 5.42	10.93
Peermade ...	192	1	4 $\frac{1}{2}$	Total ...	d1 6.22	e1 7.74	f1 5.57
(c) <i>Coorg</i> —							
Glen Lorna ...	63	1	3 $\frac{3}{4}$				
(d) <i>Kanan Devans</i> —							
Sevenmally ...	80	1	7 $\frac{1}{4}$				
Chunduvurrai ...	312	1	6				
Kanniamally ...	191	1	6 $\frac{1}{4}$				
Letchmi ...	170	1	6 $\frac{1}{4}$				
Yellapatty ...	153	1	6 $\frac{1}{4}$				
Gundumally ...	197	1	6				
Guderal ...	162	1	6				
Nullatanni ...	122	1	6				
(e) <i>Mundakayam</i> —							
Yendayar ...	154	1	3 $\frac{3}{4}$				
(f) <i>Niligiris</i> —							
·Ibex Lodge ...	60	1	9 $\frac{1}{4}$				
Prospect ...	122	1	8 $\frac{3}{4}$				
Brooklands ...	101	1	8 $\frac{1}{4}$				
Bhawani ...	125	1	7 $\frac{3}{4}$				
Glendale ...	139	1	6 $\frac{3}{4}$				
Craigmore ...	92	1	6 $\frac{3}{4}$				
Woodlands ...	130	1	6				
Mailoor ...	76	1	5				
(g) <i>Niligiri-Wynaad</i> —							
Davershola ...	186	1	7 $\frac{1}{2}$				
Seaforth ...	188	1	4 $\frac{1}{2}$				
Woodbriar ...	63	1	3 $\frac{3}{4}$				
New Hope ...	60	1	3 $\frac{3}{4}$				
Barwood ...	82	1	3 $\frac{1}{4}$				
(h) <i>South Travancore</i> —							
Poonmudi ...	55	1	4 $\frac{3}{4}$				
Braemore ...	65	1	4 $\frac{1}{2}$				
Invercauld ...	40	1	3 $\frac{1}{2}$				
Merchiston ...	83	1	3 $\frac{1}{4}$				
(i) <i>Wynaad</i> —							
Chulika ...	175	1	3 $\frac{1}{2}$				
Elstone ...	120	1	3 $\frac{1}{4}$				
Erramaculla ...	220	1	3				
Fringford ...	56	1	3				

(B) COFFEE

SPECIAL CABLE, LONDON, NOVEMBER 24, 1926
'A' QUALITY 165s. MARKET FIRM.

(C) RUBBER

The London 'Spot' quotation for
Plantation first Latex Crepe on Tues-
day, November 23, 1926, was 19d.

(B) COFFEE

SPECIAL CABLE, LONDON, NOVEMBER 24, 1926

'A' QUALITY 165s. MARKET FIRM.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, November 23, 1926, was 19d.

** 2,950 †† 139,970 †† 150,419 * 82,472 † 2,664,062 † 2,516,558
a 8,425 b 148,395 c 155,614 d 84,179 e 2,748,241 f 2,587,109

(b) *Précis of Reports on the London Market received on Monday, November 22, and covering the seven days ending Tuesday, November 2 :—*

1. *Tea.*—We regret that the London Tea Brokers' Association's reports, which after a period of three weeks in arrears were brought up to date last week, have again fallen behind hand; since no report was received this week. Consequently we have only been able to reproduce on the previous page the best and average prices which we published last week, and are unable to give detailed prices for the week ended on October 30, i. e. on the Saturday of the seven days here under review. We are able, however, to state that the South Indian average which, as shown on the previous page, was $1/6.18d.$ for the week ending 16th ultimo and $1/4.59d.$ for the week ending 23rd ultimo, had by October 30, fallen a further $1.44d.$ to $1/3.15d.$; and that owing to the very low prices realized for the lower grade South Indians, the decline would have been even more precipitate had it not been that the better qualities of Southern Indians teas continued to sell quite well.

2. *Rubber.*—Rubber also experienced a set back during the period under review; and the closing 'spot' quotation was about $19\frac{1}{2}d.$ as against the $21d.$ which we have now been recording for several weeks. Stocks increased by 1,061 tons to 42,141 tons.

3. *Coffee.*—No East Indians were offered at the London Auctions, and the nominal 'spot' quotation at the closing of the period under review was 140s. to 180d. for middling to fine 'A' size. From Mangalore we learn that the local market appears to be being supported in the main by exporters covering their earlier 'bear' sales, and that 5 tons of a good Mysore mark have changed hands at Rs. 85 ex bags.

II. Weekly Rainfall Statement

From Sunday, November 14, 1926 to Saturday, November 20, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	1.44	71.85	73.29	20. Naduvattam	...	94.22	94.22
2. Kalthuritty.	0.21	113.14	113.35	21. Coonoor ...	...	30.82	30.82
3. Kallar Bridge.	0.56	130.11	130.67	22. Kotagiri ...	...	47.19	47.19
4. Tenmalai ...	0.03	111.38	111.41	23. Ootacamund	...	42.71	42.71
5. Mundakayam.	0.23	150.21	150.44	24. Yercaud ...	...	44.79	44.79
6. Peermade ...	0.91	177.25	178.16	25. Devala ...	N.R.	145.77	N.R.
7. Twyford ...	0.58	197.27	197.85	26. Gudalur ...	...	78.83	78.83
8. V'periyar ...	0.06	79.78	79.84	27. CALICUT ...	...	123.31	123.31
9. Kalaar ...	...	195.48	195.48	28. Kuttiyadi ...	...	163.40	163.40
10. Chittuvurrai	...	40.16	40.16	29. Vayittiri ...	...	185.19	185.19
11. BODI'KANUR	0.35	22.79	23.14	30. Manantoddi.	...	105.20	105.20
12. COCHIN	...	120.82	120.82	31. Billigiris ...	...	49.96	49.96
13. Moolly Valley,	...	129.57	129.57	32. Sidapur ...	...	74.44	74.44
14. Pachaimalai.	...	123.10	123.10	33. Pollibetta ...	...	97.29	97.29
15. Mudis ...	0.15	231.25	231.40	34. Somwarpett.	...	70.56	70.56
16. Nell'pathy...	...	99.36	99.36	35. Ballupete ...	...	65.47	65.47
17. POLLACHIE.	...	31.32	31.32	36. MANGALORE	...	114.70	114.70
18. Manjeri ...	...	136.25	136.25	37. MADRAS ...	..	29.21	29.21
19. Nilambur ...	...	118.74	118.74				

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(*continued*).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson Tod & Co. :—

III. The Madras Market Report

(*For the week ending Thursday, November 25, 1926*)

(A) EXCHANGE

A state of stagnation exists, and business is practically nil. The Coal Strike continues, the serious shortage of Freight remains, and the Exchange Market is a very uncertain one. The Banks are not inclined to buy or sell without cover. During the last week there have not been any Bills appearing in this Market, and we think the same remark applies equally to Bombay and Calcutta. The Communiqué issued last weekend by Government that the Secretary of State and the British Government accepted the Currency Commission Report as a whole clearly indicates that 1s. 6d. may be taken with safety as the basis for the present and at least the immediate future, in spite of all the propaganda for 1s. 4d. The closing rates of exchange quoted here are 1s. 5 25/32d. November, 1s. 5 13/16d. first half and 1s. 5 27/32d. second half December, 1s. 5 7/8d. January/February/March, 1s. 5 27/32d. April and 1s. 5 13/16d. May/September. For three months Credits there are buyers at 1s. 6 1/8d. for two mails (possibly 1s. 6 3/32d. cash), 1s. 6 5/32d. for first two and 1s. 6 3/16d. for the last two mails in December, 1s. 6 7/32d. for January/February/March, and 1s. 6 3/16d. for April. The Franc has improved still further from 141 3/8 to 138 1/4, and on Saturday last in London was as good as 129 1/4. The London/New York rate is better at 4·84 7/8.

(B) MONEY

The small amount of enquiry referred to last week has increased, and there is now a strong demand but all for Burma. Even so rates are unchanged at 2 per cent for Call money, 2 1/2 per cent for three months, 3 per cent for six months and 4 per cent for twelve months. The Imperial Bank rate is unchanged at 4 per cent and the percentage is 43·94 against 43·38 last week.

IV. Selected Madras Market Quotations

For the week ending Wednesday, November 24, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10¾
Bank of Mysore Rs. 100	170	...
Indian Banks (Rs. 100) Rs. 50	65	66
Indian Banks (Rs. 100) Rs. 10	13¼	13½
Central Bank (Rs. 50) Rs. 25	28½	29½
Imperial Bank of India (Rs. 500)	1475	1485
" " " (Rs. 125)	370	375
Chartered Bank £5	£ 19-7-6	£ 20-7-6
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 30-11-3	£ 31-11-3
" " (£25-B) £12½	£ 30-11-3	£ 31-11-3
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-10-0
P. and O. Bank £10	£ 10-10-0	£ 11-0-0
MILLS		
Bangalore W. C. and S. Ordy. (Rs. 100)	190	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	93	97
Buckingham and Carnatic Ordy. Rs. 100	190	194
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	123	124½
Coimbatore Rs. 100	150	160
Coimbatore Malls Rs. 85	75	85
Gokaks Rs. 100	104	106
Maduras Rs. 100	415	...
INDUSTRIALS		
Deccan Sugar Ordy. Rs. 500	890	925
Deccan Sugar 7 per cent. Cum. Prefs. Rs. 100	110	112½
E. I. Distilleries and Sugar Factories Ordy. £0-16-0	15s.	17s.
E.I D. 7 per cent. Cum. Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	65 c.D.	70 c.D.
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9 x.D.	9¾ x.D.
W. E. Smith Ordy. Rs. 100	47	51
W. E. Smith 6 per cent. Prefs. Rs. 100	85	86
Spencers Ordy. Rs. 100	150 c.D.	155 c.D.
Spencers 6 per cent. Prefs. Rs. 100	97	98
Spencers 7½ per cent. 2nd Prefs. Rs. 100	115	120
Tata Iron and Steel Ordy. Rs. 75	63	67
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	76	80
United Breweries Ordy. Rs. 75	132½	135
United Breweries 6 per cent. Prefs. Rs. 100	90	95
PLANTING		
Cochins Rs. 15	53 x.D.	57½ x.D.
Eddivannas Rs. 15	29½	31
Kalajas (Rs. 15) Rs. 9	8½	9¼
Kinalurs Rs. 10	32½ x.D.	34 x.D.
Kuttiadis Rs. 15	20	22
Malankaras Rs. 30	115 c.D.	117 c.D.
Peermades Ordy. Rs. 10	28	28½
Peria Karamalais Rs. 15	44½ x.D.	47 x.D.
Periasholas Rs. 10	7	7¼
Periyars Rs. 10	21½	22½
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	4½
Thodapuzhas Rs. 10	33	35 c.D.
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22½	21 c.D.	22½ c.D.
United Nilgiris Rs. 100	115	117½
Vellamalais (Rs. 15) Rs. 13	16	16½ c.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 49] SAT., DECEMBER 4, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	821	Over the Fence ...	830
Personalia ...	823	U.P.A.S.C. Membership List ...	831
By and for Your Leave ...	824	District Association Meetings—	
Letters to the Editor—		A. Coorg ...	832
A. Venue of Annual Meet. ...	825	B. Anamallai ...	835
B. The Spraying of Coffee ...	826	Commercial and Meteorological.	840
The Necessity for Good Roads.	828		

EDITORIAL NOTES

Cynics may say that Statistics can be made to prove anything ; but Motor Import figures for the past decade furnish a striking testimony to the soundness of the recommendation, made to Government by the United Planters' Association at its last Annual Meeting, that the present Import Tax on Motor Vehicles should be abolished in the case of Commercial Lorries and reduced to 10 per cent in the case of Motor Cars. Our Readers will remember that the Indian Import Duty on Motor Cars was advanced from 5 per cent to 7½ per cent in 1916, from 7½ to 20 per cent in 1921, and from 20 per cent to the present 30 per cent in 1922. In the financial year 1920-21 the Custom realized from the Importation of Motor Cars no less than Rs. 88,00,242 ; but in 1924-25, when the duty had been quadrupled, the receipts dropped to Rs. 65,96,076. In the two years under comparison the number and value of the importations were respectively 15,432 Cars assessed at Rs. 11,73,36,555 and 9,380 Cars assessed at Rs. 2,19,86,921. These figures are especially mortifying when one learns that in Ceylon, where the duty was retained at 10 per cent, twice as many cars were imported in 1924-25 as in 1920-21. Similarly the tax of 7½ per cent levied on the 2,885 lorries imported during 1920-21 realized Rs. 25,13,609 ; while the receipts dwindled to Rs. 5,79,738 in 1924-25 when the 2,156 lorries imported were subjected to a 15 per cent tax.

The U.P.A.S.I. resolution above referred to was one of the nine points—made by a special ' Road Fund Sub-Committee ' and adopted by the Annual Meeting—which it was considered should be particularly borne in mind by Government in connection with the establishment of a road fund to be utilized for the gradual construction and maintenance of a system of adequate and co-ordinated roads. Though the pressing need for such a system needs little stressing, being only too painfully apparent to anyone whose lawful occasions condemn him to motor on the highways and a *fortiori* the byways of this land ; yet the Article on page 828 will well repay perusal, since it deals with the necessities of the present deplorable situation in an instructively original way.

One of the many old South Indian friends of Mr. Walter Morres has been moved to song by a stay which he made during his recent furlough at 'Old Court,' Bradford-on-Avon; which, under Mr. Morres's Proprietorship, has transported to pleasant Wiltshire something of the atmosphere of hospitable good fellowship which is perhaps the typical redeeming feature of European life in the East. Mr. Morres affords such lavish facilities for the Social and Sporting predilections of Anglo-Indians on furlough at such very moderate rates; that we wonder whether his establishment can actually be the paying proposition which it certainly deserves to be and which, despite our misgivings, we sincerely hope, it is. Our correspondent's happy effort appears on page 824.

*By, and for,
your leave*

Of interest also to those proceeding on leave is the announcement, by the Chief Secretary to the Government of Madras in the Judicial Department, in a Press Communiqué dated the 2nd ultimo, that the public will in future be allowed to re-import without licence .303 and .450 rifles, and pistols or revolvers of .441, .455 and intermediate bores; in respect of which they produce re-entry certificates (giving a full description of the weapon) which can be obtained from the Customs authorities on application at the time of export. In default of such certificates the Collector of Customs is given absolute discretion as to whether or not he will accept such other evidence as may be adduced to show that the weapons are not being imported into India for the first time.

*Arms and
the Man—on
furlough*

The Travancore Government Gazette, Vol. LXIV, No. 15, of the 23rd ultimo announced, under the signature of Mr. T. H. Cameron as Commissioner and Returning Officer, that under Section 14 (8) of the Revised Rules passed by Government under date January 12, 1925, for the election of members to the Travancore Legislative Council, Mr. Leonard Ashmall Lampard, Manager of Messrs. Harrisons and Crosfield, Ltd., Quilon, has been elected as the member for the Planting Constituency in place of Mr. John B. Cook who has resigned.

*Travancore
Legislative
Council*

The Financial Times says that an influential company is being formed with Sir Ernest Birch as Chairman and Sir Martin Conway and Mr. F. W. Croucher (Director of the Rim (Malacca) Rubber Estates) as Directors to acquire the whole of the Share Capital of the Companhia Paraense De Plantacoes De Borracha which owes some 415,000 acres of rubber estates. The Company intends to apply for an exclusive concession—which the Brazilian Government is empowered to grant at its discretion—for erecting a rubber factory in Para; and its activities are regarded as inaugurating an extensive development of the rubber industry in Brazil.

*Brazilian
Rubber*

The Research Sub-Committee has presented to the Imperial Conference, which concluded its sittings in London last week, a report, signed by Earl Balfour as President, which strongly recommends that an Imperial Agricultural Research Conference under the auspices of the Governments of the British Empire should be held in London next year.

*The Imperial
Conference*

PERSONALIA

MARRIAGE

THOM—GORDON-GRAY.—At St. Andrew's, Scot's Kirk, Colombo, on the 24th instant; by the Rev. C. V. A. MacEchern, Edwin John Thom, of Mundakayam, Travancore, to Adaline Maud Ogilvy, youngest daughter of the late Thomas Gordon-Gray, Esq., and of Mrs. Gordon-Gray, Stonehaven, Scotland.

ON THE SICK LIST

MR. and MRS. C. H. HUNNYBUN of Welbeck Estate, Lovedale, were in Madras this week: the latter was a patient in The Lady Willingdon Nursing Home until Thursday last.

ARRIVALS

MR. A. F. CAMPBELL of Messrs. Harrisons and Crosfield, Ltd., Cochin; MR. C. J. HALL of Messrs. The Malayalam Plantations, Ltd., Quilon; MR. ERIC HALL of Lahai Estate, Vadaserikara; MR. and MRS. G. M. MCPHERSON of Mundakayam Estate, Mundakayam, with Child; MR. and MRS. R. P. N. SWAYNE of Panora Estate, Perindotty; and MR. and MRS. G. H. DANVERS DAVY returned this week from furlough at Home.

Messrs. R. C. MORRIS of Honnamatti Estate, Attikhan P. O. and L. C. OLIVER of Kartikere Estate, arrived in Madras yesterday after Home leave.

MRS. L. L. PORTER of 'Mostyn', Coonoor, is due in Madras from Home by the S. S. *Morvada* on Tuesday next.

DEPARTURES

MR. W. GILLESPIE of Boyce Estate, Mundakayam, has sailed for Home.

MR. F. J. STANES passed through Madras *en route* to England on Thursday last.

TRANSFER

MR. A. R. H. ANGUS has been transferred from Achoor Estate, Vayitri, to Kardoora Estate, Meppadi, Wynaad.

OTHER PLANTING NEWS

MR. and MRS. J. A. NICOLSON of Chokanad Estate, Munnar, and MR. and MRS. H. A. RAGG of Sevenmallay Estate, Munnar, were in Madras this week. Messrs. Nicolson and Ragg are proceeding to Tocklai to attend the Indian Tea Association's Lecture Course. Mrs. Nicolson is proceeding as far as Calcutta, but Mrs. Ragg will await her husband's return in Madras.

MRS. P. G. CAMPBELL of Kalaar Estate, Munnar, is also visiting Madras.

MR. M. C. DECOURCY is making a stay in Ceylon.

ITEMS OF INTEREST

We learn that the ceremony in connection with the opening of the Kanan Devan Ropeway at the end of last month was a most successful affair, and hope that some Correspondent will kindly send us details of the function in due course.

The Executive Committee of the U.P.A.S.I. will meet in Madras at the Offices of the Association on Saturday, the 18th instant, at 10.30 a.m.

BY AND FOR YOUR LEAVE

(CONTRIBUTED)

When at home on leave,
Revelling in leisure,
Do we ever grieve
That our looked-for pleasure
Just falls short of bliss
For the thing we least
Thought we'd ever miss—
Our beloved East?

For we want our space;
Bungalow, not shanty;
Some old rambling place,
Garden, games in plenty;
Friendly folk about
Up to any sport;
Not the sniff of doubt,
Not the hostile snort.

A familiar face
Hailing one as brother,
And, with courtly grace,
Hinting 'just another'.
Others too who'll stop
Pleased, in turn, to pass
Round the mutual 'shop'—
Cronies from Madras.

Would you have it so?
Then there lies a haven
Whither you should go
On the banks of Avon.
'Old Court', Avoncliff,
Walter Morres—he'll
Make you happy, if
That is how you feel.

Is this but an 'ad.',
Do these verses falter?
Anyhow I'm glad
If they serve old Walter,
Who on Wiltshire loam
Now is trying hard
To produce a home
Not unlike Wynaad.

LETTERS TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' views.)

**A. Venue of the Annual Meet and
Representative Planting Teams**

THE EDITOR, THE 'PLANTERS' CHRONICLE', MADRAS,
SIR,

Having read with interest the article under this heading in your issue of the 6th instant, and also Mr. Hawkins' letter in your issue of the 20th idem, I would ask permission to put forward my views.

It seems to me the time has now come when the Sports Club, in order to do full justice to the various competitions it organizes, should divide its Annual Meet into two sessions:—

(1) At Ootacamund during February.

(2) At Bangalore during August.

At Ootacamund, I would suggest its staging only Tennis, Cricket and Golf events. At Bangalore, the 'Carver' Rugger competition, the Billiards, and the 'Dewar' Gold competition; and it might be possible, also at the latter session, to arrange a Cricket match for Coorg and Mysore Planters against 'The Rest.'

To my mind, it is now a physical impossibility to crowd all our competitions adequately into one Planters' Week at Ootacamund; and, if my suggestion be adopted, it would mean that while putting our Sports on a more seasonable basis (Football in the monsoon—Cricket in the cold weather) it would enable us to have our Representative teams at their best before taking on outside Clubs.

Mr. Hawkins' fears that if the Rugger be taken away from the Ooty Week there would be a dearth of the younger Planters for that fixture need not, I think, exist; provided an attractive Inter-district Cricket competition be substituted. I myself have never been a Hobbs, and it is therefore with considerable diffidence I make the following suggestions for Inter-district Cricket Competitions at Ooty:—

(a) Matches to be one-day fixtures of six hours.

(b) One side to bat (if it can) from 10 a.m. to 1 p.m. The other (if it cannot get its opponents out by 1 p.m. and begin batting before tiffin) is put in at 2 p.m. and allowed to bat till 5 p.m. The team which makes the most runs irrespective of the 'not outs' and 'did not bats' to win.

We want encouragement given to our bowlers and as nothing succeeds like success the opportunity given them of batsmen having to hit or get out would be the brighter for all, and all the better for the bowlers. Probably, too, in nine cases out of ten, these matches would finish before 4 p.m. leaving time to get on with more tennis events the same day.

I note the proposal of the High Range for a friendly cricket match between the Anamallais and themselves at Coimbatore; and far be it from me to deprecate such fixtures. I would warn the Sports Club Executive, however, that it is up to them to do their utmost to get such matches played at our Annual Meets; and for the very simple reason that if a player gets leave to play at Coimbatore the chances of his being able to get to Ootacamund or to Bangalore are, to a certain extent, diminishing.

In conclusion, let me mention that before writing this letter I have not had an opportunity of consulting my Coffee confreres; but I believe that a Bangalore session of our Sports Week each August, as I have outlined, would go a long way to remove Mr. Newcome's stigma that the Sports Club has 'utterly failed,' so far, to cater for the Coffee Planter.

SALLEBILE,

November 24, 1926.

Yours, etc.,

N. C. WHITTON.

B. The Spraying of Coffee

THE EDITOR,

THE 'PLANTERS' CHRONICLE',
MADRAS.

SIR,

In answer to Leaf Disease's letter in your issue of November 6, page 756, I give the following in the hope that it may meet his seemingly pressing needs.

For coffee probably the most economical strength is 4—4—50, i.e., 4 lbs. copper sulphate, 4 lbs. quicklime and 50 gallons water. Experimental work has shown that a $2\frac{1}{2}$ — $2\frac{1}{2}$ —50 solution if very carefully sprayed will give protection, but the small extra amount involved in making a 4—4—50 solution makes it probably better economy in the long run.

Bordeaux mixture freshly prepared from the raw materials, copper sulphate and lime, is always reliable, and better than any ready-made preparations on the market. Only good quicklime, either stone lime or shell lime and freshly burnt or stored in air tight tins, should be used. Old or air slaked lime will never make a good mixture. Copper sulphate should be powdered if possible, as it will then dissolve readily in water.

PREPARATION

1. Determine the capacity of the mixing barrel or vessel (which must not be iron or zinc) by filling with kerosene tins. 1 kerosene tin=4 gallons. One ordinary barrel or cask usually holds 50 gallons.

2. Weigh out the necessary amount of chemicals in the ratio 4 lbs. Copper Sulphate—4 lbs. quicklime—50 gallons water.

3. Dissolve the copper sulphate in $\frac{1}{2}$ barrel of water. The powdered copper sulphate may be put in a gunny bag and suspended in the water and if convenient left over night. Hot water may be used for dissolving the copper sulphate, but it should be allowed to cool before using it for the mixture.

4. Slake the quicklime in another vessel (a vessel of any material may be used) by adding a small quantity of water. When slaked add more water and stir well to make a thin milk of lime.

5. Strain the milk of lime slowly into the copper sulphate solution through a sieve or strainer supplied with the sprayer. If this is not done the sprayer is apt to choke. Stirring should be continued throughout this operation.

6. Test the mixture with litmus paper (obtainable from chemists in small booklets of strips) until the solution is neutral or slightly alkaline. If there is too much copper sulphate blue litmus is turned red and if too much lime red litmus is turned blue. The mixture is correct when the red litmus is just turning blue. A rough and ready test is to dip a clean piece of iron or knife blade into the solution for about two minutes. If a red deposit of copper is formed on the bright surface of the iron add more lime until no such deposit is found. A mixture deficient in lime may scorch the flush.

7. Add the prepared adhesive in small quantities stirring well all the time, and then fill up the barrel to the required quantity.

After mixing spraying should be done preferably the same day, and never after 2 or 3 days. The mixture soon loses its efficiency on standing

and the rate of the change depends on the temperature, being more rapid in hot weather. At temperatures above 75° F. spraying should always be done on the same day as deterioration may set in within six hours.

PREPARATION OF ADHESIVES

(1) *Resin Soda*.—4 lbs. of resin are finely powdered. 2 lbs. washing soda are weighed out and melted in a gallon of boiling water. This is kept boiling and the resin is slowly added. Boil until all frothing ceases and a clear thick brown sticky liquid is obtained. Insufficient boiling will produce a non-sticky gritty mixture which will clog the nozzles of the sprayers.

The above is added to fifty gallons of mixture. In some cases small amounts of adhesive have been used. 3 lbs. resin and 1½ lbs. soda per fifty gallons mixture has been found successful and even as low as 2 lbs. resin and 1 lb. soda per fifty gallons have given good results.

(2) *Casein*.—Heat about a gallon of water and dissolve the soda in it and the required amount of casein in small quantities. Stir well and heat until a thick clear sticky liquid is formed. 2 lbs. casein dissolved in about 4 oz. washing soda was used per hundred gallons mixture.

Fish Oil Resin soap has not been found so effective as either resin soda or casein even at the ratio of 5 lbs. per 50 gallons mixture. The requisite amount of soap is dissolved in soft cold or warm water.

Number of trees sprayed per day.—This varies very considerably with the state and size of the individual trees. Mr. Travers Drapes in his letter to *The Planters' Chronicle*, No. 40, dated October 2, 1926, page 670, states that a cooly with a two gallon holder sprayer will do between 100 and 180 trees per day. Experience in Coorg this year has shown that over an acreage of nearly twenty acres of good well-grown coffee, the average number of trees per cooly over the whole time worked out at 73 trees per sprayer per day. Hundred trees per day therefore would probably be a fair average.

In this connection I may mention that we did some small scale experiments with a Four Oaks Southern Cross pump. This Pump clips on to the side of a barrel, is easy to work and can be carried conveniently from place to place as it only weighs about ten to twelve lbs. The organization necessary for this type of pump would be as follows:—

The mixture is made in big containers on the roads and paths and is carried or pumped into smaller containers in the coffee. If these small containers in the coffee hold 25 gallons each and the rate per acre runs about 500 gallons, 20 of these containers would be required per acre of 4840 square yards, i. e., one container for 242 sq. yards = 2178 sq. feet = approximately 47 feet by 47 feet. With the container and pump in the centre of this portion, a length of hose pipe = half of this amount = 23 feet is necessary to get to the end row and another 23 feet from the end row to the corner of the square. In practice about 23 feet of hose pipe plus a 3 feet lance is found to be sufficient as the hose pipe does not require to go all the way to the outer edges of the rows.

This pump was found to be capable of spraying at the rate of about 100 trees per hour, in good average coffee with a gang of three men, one pumping, one spraying and the other acting as a general help keeping the mixture stirred and holding the container steady, etc., and acting as relief.

The quantity of mixture required per acre varies considerably with the trees and will run between 400-600 gallons. An average allowance will be 500 gallons.

TIME FOR SPRAYING

The best time for spraying is between the time when a fair amount of flush has appeared after the blossom showers until the beginning of the monsoon in mid June. If the young flush can be protected then the leaf will stay on until the following hot weather. September spraying has not the same effect as April, May, June spraying possibly because a certain amount of infection has already occurred.

COIMBATORE,
November 23, 1926.

Yours, etc.,
D. G. MUNRO,
General Scientific Officer, U. P. A. S. I.

THE NECESSITY FOR GOOD ROADS

(CONTRIBUTED)

The need for good roads has strongly been urged, and at the present time the question of a serious and co-ordinated road policy occupies a prominent place in the public eye. While sound pioneering propaganda has helped to foster and encourage this interest, one cannot fail to realize that official interest has still to be stimulated. There is no question but that every shade of political opinion is in favour of more and better roads. It has been shown on many occasions that the cost for a sound national system of road making will amply be repaid in a short time by the enormous benefit to trade resulting from the reduction in cost to the consumer. At present, our agricultural exports and commercial imports have to be transported over roads that are well-nigh impassable, transport charges are necessarily high, and we suffer great material losses for not taking serious note of a question of vital importance. It is generally recognized that efficient road transport, far from curtailing railway activities, is a very real asset. In India as elsewhere the freight charges are very high, a factor which also affects the construction of sound roads owing to the prohibitive cost of conveying stone and other materials from the nearest quarry to the site of the work.

LACK OF GOOD ROADS HAMPERS TRANSPORTATION

The development of motor transport could ease the situation; but, hampered by heavy taxation and lack of good roads, industry is deprived of a cheap method of transportation. Our salt industry for instance cannot compete with Cheshire though a distance of 4,000 miles separates the two countries, because it costs less to transport a ton of salt from London to Bombay than it does to do so from the South of India to Bengal. The cotton industry of Bombay and the Jute, Coal and Tea industries of Bengal are suffering from severe competition through the same cause. Our present high rates of carriage charges are a crore or two in excess of what they should be, and such a sum would provide for good roads and efficient transportation. Then again, India attracts thousands of tourists from all parts of the world annually to see its wonderful scenery, historic treasures and stately buildings; but at present a great portion of this huge traffic is

absorbed by the railways which cannot possibly serve all the needs of the tourist. The joy of travel is felt most on the open road which is the rightful sphere of the motor car, this boon however is denied to visitors owing to our poorly developed highways.

GOOD ROADS AND TOURIST INDUSTRY

If facilities for visiting places of interest are provided this country would soon become one of the tourist centres of the world. Think what it would do by way of enriching India, and incidentally tend towards a better understanding of the people of this country. To reach the trader and the agriculturist, the aim in making new roads should be not to cover ground already covered by the railway, but to open up as great an area as possible, with frequent feeders or connecting roads to the railway. In rural areas we do not want money frittered away in expensive experiments, the object being not to spend more on those roads than their particular traffic demands. For example, on most third class rural roads, a coating of good waterbound granite, surface dressed could reasonably be expected to last from eight to ten years without any expenditure other than that for occasional retreatment to keep the surface water tight. What is really wanted is soundly located and drained roads which could be improved as the country develops. The making of good roads would furnish much employment and thus help to solve many of our social problems. In great industrial countries like Great Britain and America, unskilled labour under good supervision is utilized for such purposes. The State provides for felons, and they could be employed beneficially for work of this nature. The construction of arterial roads would necessarily involve much labour at enormous cost; and when the question of economy crops up government could well make use of such labour.

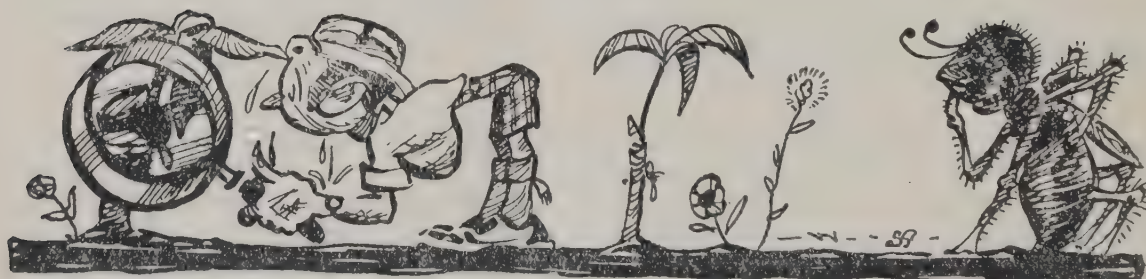
MOST ECONOMICAL METHOD OF TRANSPORT

In Australia and New Zealand where similar conditions as those obtaining in this country prevails; the motor car has long been recognized as the most economical method of transport over short distances and it is interesting to note that during the last few years vast sums have been expended on national roads in those countries. The first road programme which was proposed in Australia met with strong opposition like all progressive undertakings, but time has shown that the money was spent wisely. India has the experience of these two countries to guide her and ought to be able to devise the best and most economical methods of constructing roads adequate for present traffic conditions and capable of expansion to suit future requirements. Lastly the motorist who contributes largely to the revenues of the government by paying heavy taxes has a right to expect good roads in return.

The constant stresses occasioned by travelling over bad roads means heavy maintenance costs, which at present discourage many people from using motor cars. A country that will boldly tackle the transport problem is assured of success. We can only progress along the lines adopted by more advanced countries and follow their example. There is no chance of economic regeneration unless we are prepared to devote more attention to the improvement of our lines of communication. A sound and vigorous road policy is needed to achieve this end. Government must tackle the road programme in a more ambitious spirit than it has done hitherto if we are to advance with the times and keep abreast of other countries.



Dickery, dickery, dock!!
 ' Confound that wretched Clock,
 My time it encumbers,
 It spoils all my slumbers.
 I could hit it a " Hulluva " knock !'



Yin, twa, three,
 A Rubber-budded tree !
 When ye've plantit it
 An' tappit it
 Ye can a'cut oot yer tea !



Young Mister Muffet
 Loathes having to rough it,
 And planting just gives him a pain.
 He will fit in the ' collah '
 Of any box wallah ;
 So take him back into ' The Lane '.

U.P.A.S.I. SPORTS CLUB

List of Members whose 1926-1927 Subscriptions had been received at the U.P.A.S.I. Office on or before Tuesday, November 30, 1926

LIFE MEMBERS

Anamalais—

Congreve, C. R. T.
Hardy, E.
House, E. N.
*Jones, J. H. Ireland.
Lloyd, J. A. R.
Robinson, J. Hatton.
Simcock, E. W.

Central Travancore—

Wilkie, J. S.

Coorg—

*Tipping, P. G.

Kanen Devans—

Dixon, W. J.
Lee, W. A.
Pinches, H. L.

Mundakayam—

Murphy, J. J.

Mysore—

Godfrey, C. H.
Poyser, E. L.

Nilgiris—

Barber, Sir F.
Ives, C. St. John.
Porter, L. L.
Richardson, J. A.
Windle, Capt. E. G.

Nilgiri-Wynaad—

Adkins, J. B.
Aird, J.
Cuthell, H. L.
Fowke, R.
Fulcher, G. W.
Nicolls, J. S.

South Travancore—

Lord, E.
Mackie, J.

West Coast—

Browne, C. E. M.
Langley, W. K. M.
Lockie, H. R.
Walmesley, H. J.

Wynaad—

*Angus, A. R. H.
*Behr, B. M.
Bisset, J. E.
Davies, H. C.
Gauld, T. P.
*Hay, W. R. M.
Powell, S. H.
Sullivan, J. H. B.
Whitton, N. C.

* Became Life Members during current year.

MEMBERS

Anamalais—

Darkin, B. D.
Daughlish, J. H.
Dennys, C. E.
Elsner, C.
Fraser, M. C.
Imray, F.
John, B. L.
Jones, J. H. I. (L. M.)
Macrae, H. R.
Oakes, G. M.
Ransford, C. E.
Sampson, J. E.
Stone, E. A.
Stuart, H.
Walker, R.

Central Travancore—

Ford, G. S. Napier.
Fraser, J. F.
Gibbon, H.
How, A. H. J.
Inman, W. F.
Madden, C. J.
McMullin, R. J.
Sylvester, E. C.
Tailyour, B. P.

Coorg—

The Association.
Raymond, S. P. St. C.
Reid, J. B.
Tipping, P. G. (L. M.)

Kanen Devans—

Gray, J.
Hawkins, J. S.
Koechlin, M. C.
McIntyre, D.
McCankie, E. C.
Milne, W. O.
Olney, C. K.
Ragg, H. A.
Stanton, W. M.
Watson, H. J.
Wright, A. J.

Mundakayam—

The Association.
Calderwood, M. S.
Macpherson, H. B.
Rutherford, G. A.
Symons, J. S. P.

Mysore—

English, H. H.
Page, W. B.

Nilgiris—

Backhouse, J.
Beaver, J.
Cameron, H. S.
Cherry, W. A.
Cotton, H. G.
Deane, W. C.
Downing, A. K. Weld.
Elkington, L. G.
Greig, C. L.

Grove, R. N. C.

Lake, L. F.
Layard, R. J.
Reed, P.
Smith, J. N.
Vernede, C.
Vernede, J. B.

Nilgiri-Wynaad—

The Association.
Adkins, J. B.
Atkinson, W.
Baillie, W. K.
Bayzand, G.
Beadnell, E. H.
Bentley, R.
Bissett, J. W. G.
Blackham, J. C.
Davis, P. W.
deCourcy, H. F.
deCourcy, M. C.
English.
Farmer, F.
Foote, A.
Fowke, R.
Fulcher, G. W.
Garrett, L. G.
Geddes, E. M.
Hart, A. N. Scott.
Koechlin, E. L.
Mackintosh, D.
Merson, D.
Morshead, J. T.

U.P.A.S.I. SPORTS CLUB—(continued)

Members List—(continued)

Naylor, P. A.	West Coast—	Craig, W.
Nicolls, J. C.	Ashby, P. N.	Creed, R. S.
Nicolls, J. S.	Brameld, G. M.	Ewart, E. E.
Nicolls, R. M.	Bruce, W. L.	Eyre, E. E.
Russel.	Campbell, W. F.	Finlayson, I. W.
Scovell, G. F.	Caryll, F. A. J.	Hammond, H. J. C.
Smail, J. F.	Cox, J. A.	Hay, R. W. M. (L. M.)
Trafford, J. B.	Davidson, J. B.	Hayne, L. C. G.
Walker, C. E. C.	Hill, B. St. Maur.	Heron, W. S.
Walker, E. R. W.	Ker, W.	Hutton, H. W.
Will, J. H.	Leslie, H. C.	Janzen, E.
Wright, M.	Mitchell, J. G.	Lang, A.
Shevaroy—	Murray, J. T.	Leslie, R. A.
The Association.	Olivier, R. D.	Mackay, M. W.
Gilby, E. H.	Powell, F. H.	Peachy, E. R.
Rahm, W. A.	Wilson, J.	Pryor, K. C.
Whittle, A. H.		Ryan, T.
		Strachan, J.
South Travancore—	Wynaad—	
The Association.	The Association.	Upasi—
Cowdray, E. A.	Angus, A. R. H. (L. M.)	Brock, Maj. C. H.
Farr, E. T. C.	Archard, G. Q.	Mackie, A. H.
Glen, T. G.	Bate, D.	McDougall, A.
Jackson, T. L.	Bayzand, G.	Shaw, Dr. W. S.
Jodrell, R. N. W.	Behr, B. M. (L. M.)	Waddington, H.
Millar, F. G.	Boulton, B. St. J.	
	Broadhurst, W. T.	

DISTRICT ASSOCIATION MEETINGS

A. COORG PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of a Quarterly General Meeting, held in the North Coorg Club, Mercara, on Thursday, November 18, 1926.

Present

Messrs. P. G. Tipping (*Chairman*), W. A. F. Bracken, J. B. Reid, A. M. Webb, C. G. Maclean, A. F. Magniac, J. O. F. Maurice, W. R. Wright, G. W. Owen, S. P. St. C. Raymond, E. M. Gray, L. Newcome, Major H. S. Mullins, R. P. W. Potter, J. C. G. Glen, J. H. Sprott (*Honorary Secretary*) and W. G. L. Parsons by Proxy.

Visitors

Messrs. A. R. Piggott, Flannagon, Anderson, Carriappa, De Loës Woosnam (of Messrs. Peirce Leslie & Co., Tellicherry) and Fenner (of Messrs. Volkart Bros., Tellicherry).

Before the Meeting opened the Chairman referred to the deaths of Mr. C. W. Clode, the news of whose death had been received that morning, and of the late Col. Bucknall. A vote of condolence was passed to their relatives by the Meeting. (All Members standing).

Notice calling the Meeting was read.

Minutes of last Quarterly Meeting were read and confirmed.

Labour Department.—Mr. A. M. Webb spoke on this subject; and the following resolution was proposed by Mr. Webb, and seconded by Mr. L. Newcome.

'That this Association is of opinion that the various points raised by Mr. Webb should be submitted to the Mysore Control Committee for investigation and necessary action and result be circularized.'

Mr. Newcome spoke on the suggested transfer of Mr. Winterbotham to Coimbatore, and proposed the following Resolution which was seconded by Mr. J. B. Reid:—

‘ That this Association protests strongly against the proposed transfer of Mr. Winterbotham to Coimbatore, and invites the co-operation of the M.P.A. and W.P.A. in the matter.’

Mr. Reid spoke on the subject of Registration of coolies, and asked for the support of this Association at the next Labour Control Committee Meeting. He was instructed to speak in favour of such a scheme on behalf of this Association.

Delegates' Report.—This had been circulated to all Members, and so it was not read again. A hearty vote of thanks was proposed to the Delegates for attending the Meeting in Bangalore.

New Members.—The following were brought up for election:—

	<i>Proposer.</i>	<i>Seconder.</i>
Mr. D. Narayana Shetty	Mr. Sprott	Mr. Raymond.
Miss F. C. D'Vaz	„ Tipping	„ Wright.
Mr. R. P. W. Potter	„ Sprott	„ Magniac.
„ G. W. Owen	„ Sprott	„ Maclean.

These Members will be balloted for in the usual way.

Articles of Association.—Rule 6 (a) and (b). Association Rules No. 3. Mr. Magniac brought up this subject to see if the Meeting was in favour of inserting ‘or in charge of’ in the Articles of Association, as it was in the Association Rules No. 3. The Meeting seemed in favour of it, and a resolution may be brought up at the next General Meeting.

Systematic Reduction of Advances to Labour.—The Meeting was in favour of the idea, and the Honorary Secretary was instructed to write to the Shevaroy Planters' Association asking for their rules on this subject and any other suggestions.

Subsidising a Solicitor for the C.P.A.—It was decided to let the matter drop, as eleven Members voted against the idea and only four voted for it.

Collection of Assessment by Nad Offices.—Honorary Secretary read a letter from the Commissioner of Coorg, saying that it was proposed to transfer the collection of Assessment due from the European Planters from the Commissioner's Office to the Nad Offices, and requesting the views of this Association. The Honorary Secretary was instructed to write to the Commissioner asking if money would have to be paid into the Nad Offices or into the Treasury, Mercara; as, if the former, Members were against it; but, if the bills only were going to be issued by the Nad Offices and the money paid as at present into the Treasury, no one was against the idea.

Roads.—Honorary Secretary read letter from the Executive Engineer *re* Anechowkur Road.

Major Mullins spoke on the Mulnad Road; but as Mr. Parsons the mover was not present and it was not clear exactly where the road was or how much of it is in need of repairs, the Honorary Secretary was requested to write to him for further particulars.

Kuttupoya Temporary Bridge.—Mr. Fenner said he had heard this would be opened on the 20th, but had later heard that it would not be opened till later.

Kuttupoya Permanent Bridge.—The Honorary Secretary read a letter from the Honorary Secretary, Tellicherry Chamber of Commerce, saying this bridge would be completed before next Monsoon; and Mr. Glen said works have been started.

Portland Rubber Estate.—The Meeting sanctioned the transfer as from January 1, 1927.

Coffee.—The Chairman spoke on the subject of carrying on the Experimental Station at Sidapur until some definite conclusion has been arrived at regarding Scientific Aid to Coffee.

Telephones.—Honorary Secretary was asked to write round and find if Members were in favour of the idea in general.

Benevolent Fund.—Honorary Secretary read a letter from Mr. H. Waddington on the subject. Resolved that this Association cannot recommend anything except the payment of school fees at a school approved by the Executive Committee. The Honorary Secretary was instructed to write to the Secretary, U.P.A.S.I., to this effect.

Representatives on the District Board.—Messrs. Tipping and Raymond were elected by ballot and duly consented to stand.

The following propositions, not being under the auspices of the C.P.A., were brought up after obtaining the consent of the Meeting.

Coffee and Pepper Stealing Prevention Fund.—Proposed by Chairman :—

‘That this not being part of the C.P.A., and in the absence of both the proposer and seconder, it was not clear how the C.P.A. can take up this matter; but they would like to suggest that a few simple rules should be drawn up and circulated amongst subscribers of that fund for their acceptance.’

Motor Union.—Proposed by Major Mullins, seconded by Mr. Newcome :—

‘That in the opinion of this Association a body to be called the Coorg Motor Union should be formed for the purpose of protecting the interests of all Motor Owners and Motorists in Coorg.’

Mr. Webb kindly said that he would try to start the matter; by meeting the Commissioner, and then calling a Meeting of all Motor Owners in Coorg.

The Honorary Secretary read other correspondence. It was decided that the reply to the Questionnaire of the Royal Commission on Agriculture should not be answered by this Association, as it was believed the U.P.A.S.I. were doing so.

With a vote of thanks to the Chair and the Honorary Secretary, the Meeting terminated.

J. H. SPROTT,
Honorary Secretary.

P. G. TIPPING,
Chairman.

B. THE ANAMALLAI PLANTERS' ASSOCIATION (INCORPORATED)

Minutes of an Extraordinary General Meeting held at Anamallai Club, at 2 p. m.,
on Wednesday, November 3, 1926.

Present

Messrs. J. E. Sampson (*Chairman*), C. R. T. Congreve, M. L. C., J. Hatton Robinson, J. H. Ireland-Jones, G. A. LeMesurier, T. Davenport, E. Johnson, H. de V. Gosselin, A. V. Danagher, E. N. House, S. Sladden, E. Hardy, B. L. John, G. Oakes, P. E. Achard and W. H. Martin (*Honorary Secretary*).

Notice of the meeting having been read, the Chairman spoke as follows, all present standing :—

GENTLEMEN,

It is with much sorrow that once more, I have occasion to refer to the loss sustained by our community, in the sudden death, from pneumonia, of Mr. G. W. Wallace of Gajam Mudi Estate.

Mr. Wallace was well known, both in work and in play, and well liked by all of us. He took a keen interest in all District affairs; and, only a short time prior to his death, had accepted the duties of your Honorary Secretary.

I feel sure that you will desire that our Honorary Secretary shall convey to Mr. Wallace's relatives the deep-felt sympathy of all members of this Association.

A letter of sympathy from the Kanan Devan Planters' Association was also read.

Minutes.—The minutes of the following meetings were taken as read, copies having been circulated to members.

1. Meeting of General Committee, dated June 14, 1926.
2. do. do. do. dated July 22, 1926.

The following minutes of meetings were read by the Honorary Secretary :—

1. Meeting of Special Labour Committee *anent* Kalianapandal/Waterfall Estates' labour dispute dated August 12, 1926.
2. Meeting of Special Labour Committee *anent* Sholayar/Thoni Mudi Estates' labour dispute dated September 29, 1926.
3. Meeting of General Committee dated October 21, 1926.

All the above were confirmed, subject to the deletion of a minute of objection made by Mr. Congreve, at the last mentioned meeting. (Further reference to this item will be noted under the heading of 'Township').

ELECTION OF MEMBERS

Proposed from the Chair that Doctors Horrocks, Measham, Johnson, and Rev. Bleby be elected Members.

Proposed by Mr. LeMesurier and seconded by Mr. Davenport that Mr. L. S. Henderson and Mr. L. N. S. Hewitt be Members.

Proposed by Mr. Congreve and seconded by Mr. House that Mr. J. C. Fraser be elected.

Carried unanimously.

CHURCH

After some discussion as to the possibility of building a Church in the District, the following resolution was proposed by Mr. Congreve and seconded by Mr. Robinson :—

'That Messrs. Johnson, Jones and Oakes be asked to form a sub-committee to go into ways and means regarding a Church in the District.'

Carried unanimously.

TOWNSHIP

It was decided that the minute of objection by Mr. C. R. T. Congreve in the proceedings of General Committee dated October 21, regarding the Township Committee giving land to Wesleyan Mission be rescinded.

Proposed by Mr. Robinson and seconded by Mr. Johnson :—

'That Dr. Horrocks if so willing be co-opted on the Township Committee and that the cost of keeping the Market area and buildings in a proper sanitary condition shall be defrayed from rents accrued.'

Carried Nem-Com.

Proposed by Mr. Congreve and seconded by Mr. Jones :—

'That in the event of more bazaars being required on the Valparai Township, Estate proprietors and agents at the north and east ends of the District be asked to subscribe the necessary Capital, and rents accruing from these bazaars shall be kept in a separate account for the benefit of the interests subscribing.'

Carried Nem-Com.

ROPEWAY

Mr. Congreve informed the meeting as to the position of affairs and as to progress made.

RAILWAY

Mr. Congreve informed the meeting as to the proposed Pollachi/Anamallai Light Railway.

BANGALORE DELEGATES

Mr. Sampson reported as follows :—

GENTLEMEN,

We beg to place before you our report with reference to the Annual Meeting of the United Planters' Association of Southern India, held in Bangalore in August last.

Collection of Subscriptions.—Our instructions were to press that this should be done through Honorary Secretaries of District Associations, throughout the U. P. A. S. I. The proposal was dropped because it did not meet with the approval of the Secretary, who pointed out that, at present some large Companies pay for all their Estates, in more than one district, by means of one cheque: this method greatly simplifies the Secretary's work, and he did not wish the system upset.

We inquired if any Associations were in arrears of subscriptions, for the past financial year, and were informed that all Associations had paid in full.

Planters' Chronicle.—At your request we desired that the congratulations of the meeting on the much increased efficiency of this Journal should be conveyed to the Managing Editor.

A letter has since been received from Mr. Cockaine, expressing his appreciation of our remarks.

Labour Rules.—You directed us to oppose the resolution to be brought forward by the Shevaroy Association, with reference to Salem and Bomidi Stations: this resolution was withdrawn.

Recruiting Forms.—We were requested to refer to the apparently unnecessary forms in use in the Srivilliputtur Division, but being in a very small minority, considered it advisable to let the matter drop, as no useful purpose could be served by pressing it.

Scientific: Tea.—We moved, and were seconded by the Wynaad Association, that the proposals for the future working of the Tea Scientific Department, as set out in letter of the 3rd July from the Secretary, then before the meeting, be adopted.

We also proposed that the Indian Tea Association be requested to permit an Annual visit and report by Mr. Carpenter, on the U.P.A.S.I. Tea Scientific Department.

Both these resolutions were passed.

Our resolution that an Assistant for Dr. Shaw be engaged at once, and that the other provisions of the amended scheme shall come into force as from the 1st of the next financial year, was also carried unanimously.

General.—It may be noted that practically an entire afternoon of the U.P.A.S.I. meeting was wasted for every Delegate by irrelevant discussion on Scientific questions. We are of opinion that this Association should recommend to the Executive Committee of the U.P.A.S.I. that to prevent recurrence of this waste of time at future meetings, in discussion of the Scientific Officer's report only such questions shall be permitted as arise strictly out of that report, and only such as are not answerable, by the Scientific Officer concerned, through the post.

We consider a general debate on Scientific matters is out of place at such a meeting, and should not be permitted.

European Employees' Medical Expenses.—We voted in favour of the resolution, referred to on page 33 of the 'Book of Proceedings,' to the effect that the U.P.A.S.I., should subscribe to the L.A.N.I., and the S.I.N.A., on behalf of its employees, thereby ensuring the U.P.A.S.I. the benefit of these Associations at reduced rates.

Indian Employees' Provident Fund.—The Rules and Regulations of this Fund were agreed to, subject to Membership being optional to all employees engaged prior to the 1st April next, and compulsory to all engaged thereafter.

Anamallai Leases.—Our resolution, asking the U.P.A.S.I. to request Government to reconsider their refusal to alter the Anamallai Leases, in order to make them renewable after a period of 60 years, was duly accepted.

(This Association has since received a reference from the Secretary, U.P.A.S.I., as a result of an interview with a Government Official inquiring if this District is willing to accept Ryotwari Puttah Leases in exchange for the present Forest Leases, and with the approval of your Committee, I have replied in the affirmative.)

Roll of Honour.—The resolution approved by your Association, was duly put to the Meeting, and carried.

In conclusion, your Delegates beg to thank you for the honour done them and will be pleased to reply to such questions as Members may wish to make.

(Signed) A. C. COTTON. } *Delegates to*
J. E. SAMPSON. } *Bangalore.*

Proposed by Mr. Sladden and seconded by Mr. Jones :

‘ That a hearty vote of thanks be given to the Delegates and that their expenses be sanctioned at same rates as last year.’

Carried unanimously.

DISTRICT BOARD

Mr. Congreve gave details with reference to the Deputation to the Collector of Coimbatore on August 19, and read letter No. 7270, dated October 24, from the Collector. It was decided to drop the matter for the time being and that the Collector be informed accordingly.

ALTERATIONS AND ADDITIONS TO LABOUR LAWS

The following suggestions of the Sub-Committee were put before the meeting :—

Rule No. 1.—That this shall be deleted, being unnecessary, and not in accordance with the Articles of the Association.

Rule No. 12.—That the words ‘and Honorary Members’ be deleted, consequent upon the deletion of Rule No. 1.

Rule No. 14.—That the words ‘who so wishes’ be added to the rule. It is suggested that the Honorary Secretary shall purchase copies only for such members as advise him, after his enquiry, that they desire same. By this means certain unnecessary expenditure can be curtailed.

L. L. No. 2.—That this shall be deleted.

L. L. No. 3.—That the words ‘Maistry or’, on the third line be deleted : and that the words ‘a period of three years from date of default’ shall be inserted in place of the words ‘the contract period’ on the fourth line.

L. L. No. 5.—That in place of the words 'Maistry's or Contractor's' on the third line, the following shall be substituted:—'Maistry's, Chol-Maistry's or Contractor's.'

That the following shall be added:—

'Definition of the word "Maistry" (*vide* U.P.A.S.I., Labour Rule 'No. XV):—

'In these rules the words "Labour Supplier" shall be interpreted to include all suppliers of labour, such as Agents, Writers, Kanganies, Maistries, Sub-Kanganies, Chol-Maistries, and all labourers who contract to work on an Estate direct with the Superintendent or Proprietor of the Estate.'

L. L. No. 9.—That in place of the words 'Check Roll Coolies' shall be written the words 'Check Roll Agricultural Labourers'.

L. L. No. 10.—That this rule shall be altered to read as follows:—

'A Labour Committee shall be elected to deal with any inter-Estate differences that may arise under these Labour Laws: the finding of this Committee shall be final, and shall be reported to the next General Meeting of the Association. The Chairman and Honorary Secretary shall be permanent Members of this Committee, and shall have power to elect three Members of the Association to deal with each case as it occurs'.

'This Committee shall have power to use their discretion in administering Rule 5, subject to a right of appeal by either contestant to the next General Meeting of the Association, whose decision shall be final.'

'Each contestant in any case brought before this Labour Committee shall deposit the sum of Rs. 50: with the Honorary Secretary of the Association, the forfeiture of the whole or part of which shall be at the discretion of the Committee.'

The suggested alterations were approved.

Proposed by Mr. Jones and seconded by Mr. Danagher:—

'That the deletion of the Rule 6 should be left over for further consideration at a later meeting.'

Carried by Chairman's casting vote.

Proposed by Mr. Robinson and seconded by Mr. Sladden:—

'That a hearty vote of thanks be given to the Sub-Committee.'

Carried unanimously.

It was suggested and the Honorary Secretary instructed accordingly, that Typed Copies of the amended and altered rules be circulated before the next meeting.

CORRESPONDENCE

Read letter No. 6328, dated October 29, from the Secretary, U.P.A.S.I., reference certifying Surgeons and the Honorary Secretary was instructed to write to the Secretary, U.P.A.S.I., that the three Medical Officers in the District shall be empowered to certify labour for such estates as do not belong to their own respective Medical Groups.

CONTROL COMMITTEE

Mr. Sampson, Control Committee Member, gave a brief Report of the two recent meetings of the Coimbatore Control Committee.

With a vote of thanks to the Chair the Meeting terminated.

W. H. MARTIN,
Honorary Secretary.

J. E. SAMPSON,
Chairman.

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) *Some of the higher London Prices—*

(A) *Tea*.—We still await receipt of the usual detailed Price Lists for the weeks ending October 30 and November 6, and we are not republishing the list for the week ending October 23, which we have already reproduced twice.

(B) *Coffee*.—SPECIAL CABLE, LONDON, DECEMBER 1, 1926, 'A' QUALITY, 165s. MARKET FIRM.

(C) *Rubber*.—The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, November 30, 1926, was 18½d.

(b) *Précis of Reports on the London Market received on Monday, November 29, and covering the seven days ending Tuesday, November 9 :—*

1. *Tea*.—Though, as stated above, we have had to omit the usual feature which, if included, would have shown our Readers the detailed prices obtained during the week ended November 6; we can, thanks to THE MADRAS MAIL, record their London Correspondent's report that 'prices firmed up, and that the South Indian average was quite ½d. better at 1s. 3·75d.'

2. *Rubber*.—Last week we recorded the closing 'spot' quotation for the previous seven days at 1/7½d. per pound to which it fell from 1/9d. on Monday, November 1; owing to heavy unloading on the London Market by Singapore where (and also in Colombo) the Government's intentions for the current Restriction Quarter were declared before they were announced at Home. However, at the close of the period under review, the price had recovered to 1/8½d. Stocks increased during the week by 904 tons from 42,141 tons to 43,045 tons.

3. *Coffee*.—No East Indians were offered at the London Auctions, and the nominal 'spot' quotation was 160s. to 180s. for middling to fine 'A' size. The stocks in bags of African, Indian, and other kinds respectively on November 6, were 19,832, 7,873 and 61,733 as against 31,716, 27,602 and 95,766 on the corresponding date last year.

4. *Pepper*.—The market was firmer with fair Tellicherry quoted at 13d.

II. Weekly Rainfall Statement

From Sunday, November 21, 1926 to Saturday, November 27, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	0·62	73·29	73·91	20. Naduvattam	...	94·22	94·22
2. Kalthuritty.	...	113·35	113·35	21. Coonoor ...	...	30·82	30·82
3. Kallar Bridge.	0·10	130·67	130·77	22. Kotagiri, ...	...	47·19	47·19
4. Tenmalai ...	0·02	111·41	111·43	23. Ootacamund	...	42·71	42·71
5. Mundakayam.	...	150·44	150·44	24. Yercaud ...	...	44·79	44·79
6. Peermade ...	0·05	178·16	178·21	25. Devala ...	...	N.R.	N.R.
7. Twyford ...	N.R.	197·85	N.R.	26. Gudalur ...	...	78·83	78·83
8. V'periyar ...	0·08	79·84	79·92	27. CALICUT ...	...	123·31	123·31
9. Kalaar ...	...	195·48	195·48	28. Kuttiyadi ...	N.R.	163·40	N.R.
10. Chittuvurrai	...	40·16	40·16	29. Vayittiri ...	...	185·19	185·19
11. BODI'KANUR	N.R.	23·14	N.R.	30. Manantoddi.	...	105·20	105·20
12. COCHIN	...	120·82	120·82	31. Billigiris ...	...	49·96	49·96
13. Mooply Valley,	...	129·57	129·57	32. Sidapur ...	N.R.	74·44	N.R.
14. Pachaimalai.	...	123·10	123·10	33. Pollibetta ...	...	97·29	97·29
15. Mudis ...	...	231·40	231·40	34. Somwarpett.	...	70·56	70·56
16. Nell'pathy...	...	99·36	99·36	35. Ballupete ...	...	65·47	65·47
17. POLLACHIE.	...	31·32	31·32	36. MANGALORE	...	114·70	114·70
18. Manjeri ...	...	136·25	136·25	37. MADRAS ...	0·01	29·21	29·22
19. Nilambur ...	...	118·74	118·74				

W=During the week.

P=Previously. N. R.=No return received.
(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, December 2, 1926)

(A) EXCHANGE

Again it has been an almost blank week so far as business is concerned. If the Coal dispute is not settled in all of the coal districts, the news in to-day shows at least that a very high percentage of the Miners are back at work. There cannot, however, be any immediate result from this; and it must take some two or three months before any real benefit is noticeable. Presumably then with the release of the Colliers, the freight position will be better and more tonnage available out East. Meanwhile, during the week rates have sagged steadily, the drop being due to some extent to Silver Bullion remittances and further to the almost complete absence of Bills. The present Exchange position is unprecedented. Telegrams from Bombay show a state of almost complete stagnation, though these are reported to be a few more bills showing in Calcutta. Government sold a small amount of Exchange in Bombay at 1s. 5 3/4d., i. e. Reverse Councils. The closing rates of Exchange quoted here are for Banks selling T. T. 1s. 5 3/4d. December, 1s. 5 25/32d. January, 1s. 5 13/16d. February/April and 1s. 5 25/32d. May/September. There are buyers of three months Credits at 1s. 6 3/32d. for three mails, and 1s. 6 1/8d. for the other two mails in December; 1s. 6 5/32d. January; 1s. 6d. 3/16 February/March; and 1s. 6 5/32d. April. Business for the mails has been done at 1s. 6 1/16d., but the rate is not readily available. The Franc has again improved from the closing rate a week ago at 138½ to 130½. The Pound sterling in New York is unchanged at 4·84 15/16.

(B) MONEY

The sole demand at the moment is for Burma, and although that is good there is no other enquiry. Rates are again unchanged, viz., 2 per cent for Call money, 2½ per cent for three months, 3 per cent for six months and 4 per cent for twelve months. The Imperial Bank rate is unchanged at 4 per cent and the percentage of cash to liabilities is down to 41·81 from 43·94 a week ago.

For the week ending Wednesday, December 1, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10½
Bank of Mysore Rs. 100	165	170
Indian Banks (Rs. 100) Rs. 50	65	67½
Indian Banks (Rs. 100) Rs. 10	13½	13½
Central Bank (Rs. 50) Rs. 25	29½	30½
Imperial Bank of India (Rs. 500)	...	1500
" " (Rs. 125)	370	375
Chartered Bank £5	£ 19-7-6	£ 20-7-6
Eastern Bank (£10) £5	£ 6-2-6	£ 6-7-6
Mercantile Bank (£25-A) £12½	£ 30-0-0	£ 31-0-0
" " (£25-B) £12½	£ 30-0-0	£ 31-0-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-10-0
P. and O. Bank £10	£ 10-7-6	£ 10-17-6
MILLS		
Bangalore W. C. and S. Ordry. (Rs. 100)	...	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	93	97
Buckingham and Carnatic Ordry. Rs. 100	190	191
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	124	...
Coimbatore Rs. 100	150	160
Coimbatore Mills Rs. 85	75	85
Gokaks Rs. 100	102½	106½
Maduras Rs. 100	415	...
INDUSTRIALS		
Deccan Sugar Ordry. Rs. 500	900	950
Deccan Sugar 7 per cent. Cum. Prefs. Rs. 100	110	112½
E. I. Distilleries and Sugar Factories Ordry. £0-16-0	15s.	17s.
E. I. D. 7 per cent. Cum. Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	65 c.D.	70 c.D.
Malabar Match (Rs. 10) Rs. 7	1½	2
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9	9½
W. E. Smith Ordry. Rs. 100	47	51
W. E. Smith 6 per cent. Prefs. Rs. 100	85	86
Spencers Ordry. Rs. 100	150 c.D.	155 c.D.
Spencers 6 per cent. Prefs. Rs. 100	97	100
Spencers 7½ per cent. 2nd Prefs. Rs. 100	120	122½
Tata Iron and Steel Ordry. Rs. 75	64	68
" " 7½ per cent. 2nd Prefs. (Rs. 100)	78½	80½
United Breweries Ordry. Rs. 75	135	137½
United Breweries 6 per cent. Prefs. Rs. 100	92½	97½
PLANTING		
Cochins Rs. 15	51	55
Eddivannas Rs. 15	29½	31
Kalajas (Rs. 15) Rs. 9	8½	9
Kinalurs Rs. 10	32½	34
Kuttiadis Rs. 15	20	22
Malankaras Rs. 30	112 c.D.	116 c.D.
Peermades Ordry. Rs. 10	27	28½
Peria Karamalais Rs. 15	44½	47
Periasholas Rs. 10	...	7
Periyars Rs. 10	21½	22½
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	5
Thodapuzhas Rs. 10	31 x.D.	33 x.D.
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22½	...	20 x.D.
United Nilgiris Rs. 100	115	117½
Vellamalais (Rs. 15) Rs. 13	14½ x.R.	15½ x.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address: POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address: UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI. NO. 50] SAT., DECEMBER 11, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	843	A Rubber Survey ...	850
Personalia ...	845	South Indian Exports of Coffee,	
The U.P.A.S.I. Sports Club ...	846	Rubber and Tea ...	854
Coffee in Mysore ...	847	Commercial and Meteorological.	855
The Battle of Kalavardekkal ...	849		

EDITORIAL NOTES

Greetings for Xmas and New Year
The Madras Station of the Eastern Extension Australasia and China Telegraph Company, Limited, certainly cater most satisfactorily for the plight in which so many of us find ourselves at this season, as the result of having failed to write our Christmas and New Year Greetings in time for despatch by the Outward Christmas Mails. Between the 15th and 30th instants, the Company will accept cables for transmission to various parts of the British Empire at greatly reduced rates. The special charge for telegrams to the United Kingdom, the Irish Free State, Gibraltar and Malta will be 4 annas per word subject to a minimum charge of Rs. 2-8-0; whilst telegrams to Africa (East, West and South), Australia, China, Cyprus, Egypt, Japan, New Zealand, The Phillipines, and Straits Settlements, will be accepted at one-fourth the ordinary rates. We notice that similar concessions are being advertised in the Daily Press regarding the Indo-European Telegraph Co.'s *via Indo* route.

Galle Face Hotel, Colombo
The Manager of the Galle Face Hotel, Colombo, advises us that from the 1st proximo the residential rate (inclusive of Afternoon Tea) for Members of the U.P.A.S.I. Buying Agency will be Rs. 15 per day.

Corrigendum
Mr. E. L. Poyser points out that as he has now left Mysore his name would have been more correctly shown under the Shevaroya District than under the Mysore District in the list of Life-Members of the Upasi Sports Club which we published on page 831 of our issue of December 4, 1926. The necessary alteration will of course be effected in future lists.

A Shipping Innovation
We believe that the announcement, dated the 1st instant, by the Messageries Maritimes of a new Monthly Service carrying First, Second and Third Class Passengers from Marseilles, *via* Pondicherry, Madras and Singapore, to Saigon and Haiphong and *vice versa* marks the inauguration of Third Class Ocean Passenger transport between Europe and South India. The first homeward sailing will be the S.S. *Ambrose* which leaves Madras on the 9th proximo and

Colombo on the 13th and is due at Marseilles on the 31st. The Third Class fare between Marseilles and Madras is £30 by two (the S. S. *Compiègne* and *Chantilly* each of 16,137 tons) and £26 by the other two (the S.S. *Azay Le Rideau* and *Amboise* of 14,000 tons and 14,450 tons respectively) of the four Steamers which are being placed upon the run. These fares are the same as those which the Company charges to Marseilles from Colombo; from which port, however, Third Class passages To LONDON are offered by companies like the Nipon Yusen Kaisha and the Australian Commonwealth Line at a fare as low as £29. The address of the Messageries Maritimes' Madras Office is No. 6/20, North Beach Road.

To avoid disappointment, will readers desirous of obtaining a bound volume of *The Planters' Chronicle* for 1926, at Rs. 5 plus postage, kindly place their orders with the Managing Editor *ek dum*; as the Publishers will have to be advised before Xmas of the number of bound volumes which are required. Readers proposing to have the copies they receive each week bound for themselves at the end of the year can obtain an index for inclusion in the volume at Re. 1 post free, provided their order—accompanied by a remittance—is placed with us before the 24th instant, when the Index will be sent to the Press.

The Home and Colonial Mail makes the following remarks regarding the Restriction Scheme modifications which became effective on the 1st of last month:—'The whole position can now be viewed with more confidence than for the past six months by growers, by consumers, and by shareholders; for the doubts regarding the action contemplated by the Colonial Office are set at rest, and it is possible to look ahead for a sufficient period to induce a considerable increase in business. Manufacturers will now be able to fill their requirements and estimate their production costs for the next twelve months, which is what few other industries are able to do to-day. Producers will be able to gauge their income, which should lead to economical management and methodical progress. Shareholders will be able to estimate within a reasonable margin the potential profits of planted areas, and thus the speculative element in rubber shares will be modified and their position, as a sound high-yielding investment, will be immeasurably strengthened.'

Judging by the wire received in Madras on Wednesday from the Associated Press at Cawnpore, Sir Charles Innes was by no means over-enthusiastic about the resolution, proposed by Mr. Kar of the Bombay Chamber of Commerce and unanimously passed by the Associated Chambers in annual meeting assembled, recommending the reduction of the import duty on motor vehicles, and the imposition of a special vehicle tax to finance a Central Road Board which would be vested with executive responsibility for the maintenance of all trunk roads and act as an advisory body to Provincial Governments on all local road schemes.

Sir Charles said he feared the Government's pledge to reduce the Provincial Contributions under the Meston award would preclude any reduction in the import duty, and expressed the view that the proper function for Central Road Board would be to co-ordinate rather than to anticipate the activities of Provincial Road Boards which it yet remained for the local Governments to create.

A *via media* to the *impasse* might possibly be found if Government would agree to allot proportionately to the Provinces for road construction and maintenance all proceeds from the import duty in excess of a certain fixed amount,

It is announced that the November average price of Rubber in London was only 19·818*d.*; so that manufacturers, if desirous of avoiding a reduction of 10 per cent next February in the present exportable quota of 80 per cent, will obviously have to effect large purchases at a price very considerably above the 18 odd pence which Reuter's cables are now quoting for 'spot.' In this connection, we notice that our contemporary *The Times of Ceylon* suggests that the recently created New York Rubber Manufacturers' Organization may utilize its credit of 40 million dollars to lay in a stock of some 50,000 tons of rubber to be held against a rise in price. Rubber dealers, however, would, in all probability, regard such a move as a usurpation of their legitimate functions; and it is intriguing to speculate what action they would take if the contingency in question actually arose. The possibilities of the situation, moreover, indicate that the immediate future of the rubber industry may not be as placidly uneventful as *The Home and Colonial Mail* suggests in the excerpt which we have embodied in another Editorial note.

PERSONALIA

ARRIVALS

MR. and MRS. G. M. BRAMELD returned from Home by the M. V. *Shropshire*, and have proceeded to the Mooply Valley Rubber Company's Chockana Estate, Palapilly, Cochin State.

MESSRS. P. GREEN and C. KERSHAW also arrived by the same opportunity and have joined the Mooply Valley Rubber Company's staff.

MR. O. M. HETHERINGTON, of Messrs. The Stanmore Estates Co., Ltd., accompanied by his bride, has returned from Home leave.

MRS. PRYOR has arrived in India from China to visit her son Mr. K. C. Pryor at Cherakara Estate, Wynaad.

MAJOR C. H. BROCK, O.B.E., V.D., the Director of the Labour Department of the U.P.A.S.I., is due back from Home early next week.

OTHER PLANTING NEWS

MR. and MRS. G. H. DANVERS DAVY, whose arrival from Home we announced in last week's issue, are staying at the Glenview Hotel, Coonoor.

MR. and MRS. G. A. MARSH of Puthutotam Estate, Valparai and of Ootacamund, have arrived in Madras for the Season and are living at Guindy.

MESSRS. C. L. and N. M. HIGHT of respectively Cauvery Peak and Moganad Peak Estates, Nagalur, The Shevaroy's, were in Madras on Wednesday last.

MR. A. R. TURNER of Calicut Estate, Kunnammangalum, Malabar, was also in Madras this week, staying at Spencer's Hotel.

MRS. J. E. SAMPSON of Pachaimallai Estate, Valparai, is a guest of Mrs. Anstead at Nungambakkam High Road, Madras.

U.P.A.S.I. SPORTS CLUB

A. THE CLUB RULES

PRINTING OF RULES.—There have been a few applications for copies of the rules. The Committee do not wish to go to the expense of printing until after the next General Meeting of U.P.A.S.I. when an alteration in rates of subscription is likely to be passed.

Meanwhile applicants are referred to page 121, Book of Proceedings, 1926 which is obtainable from Honorary Secretaries, District Associations.

B. THE CLUB BLAZER

The cloth has now arrived from England.

All District Representatives have been provided with a sample and details regarding the ordering of blazers from the firm in Madras which has taken on the contract.

When ordering from Messrs. M. A. R. Shaik Mohideen & Co., 162, Mount Road, Madras, members are advised to send an old coat as pattern in preference to tailor's measurements, in order to ensure a decent fit.

PRICE of blazer complete including Club badge (selected by the Sports Committee), and plain brass buttons—Rs. 28.

Club buttons are being procured later.

C. PLANTERS' 'WEEK', OOTACAMUND, FEBRUARY 18-27, 1927

The Meet will open on Friday 18th and the Tennis Tournaments will commence the same afternoon at 2 p.m. at Woodside.

Golf events will commence on morning of 19th at 10 a.m.

TENNIS CUPS—

	...	...	...	...	<i>Holders</i>
Inter-District	...	...	...	...	Mundakayam.
Harper's Men's singles	...	...	...	...	Mr. Collet.
(Richardson's) Veteran's	...	...	...	...	Mr. Pinches.
Murphy's Ladies (non-challenge)	...	...	...	...	Miss Barber.

A Cup will also be presented for Open Mixed Doubles. The donor is Mr. Pinches.

GOLF CUPS—

	...	...	...	...	<i>Holders</i>
Inter-District	...	...	...	...	Kanan Devans.

In the place of Mr. Pinches' Cup for Men's singles (won last year by Mr. Colthurst), Mr. Congreve will present one for a similar event.

Capt. Windle will again present a Cup for Ladies singles (won last year by Miss Barber), but this year it will be played for on handicap.

CARVER RUGBY FOOTBALL TOURNAMENT—At Wellington Gymkhana.

Holders—Anamalais.

To commence probably on Sunday evening 20th.

CRICKET.—Will commence on February 23 with a two days' match against a Combined West Coast XI, followed by the usual fixture with the Madras Cricket Club on 25th and 26th.

EVENING SHOWS.—Will be as usual; and will include two night dances at Woodside and Fancy Dress Ball at Assembly Rooms, Children's Fancy Dress, and either a Revue, Play or Concert put on by the O.A.D.S. at Assembly Rooms.

'Before-dinner-dancing' any evening at Woodside; except on the two night dance days.

THE ROYAL TANK CORPS BAND is engaged for the Week.

It is hoped that the tennis and golf will be completed on the afternoon of Tuesday 22, as Wednesday 23 is likely to be kept free for U.P.A.S.I. business meetings.

Members who intend travelling by rail are reminded that the S.I.R. allow concession on return tickets to the Hills in the cold weather months. This concession is good to end of February.

WOODBRIAR ESTATE, DEVARSHOLA,
December 3, 1926.

G. W. FULCHER,
Honorary Secretary.

COFFEE IN MYSORE

The Annual Report of the Mysore Agricultural Department for the year 1924-25, (i.e. presumably for the 12 months ended June 30, 1925. Ed.) which has only recently reached us and which bears no indication of the actual date of its publication, contains the following interesting remarks on the Coffee Industry in Mysore.

THE GOVERNMENT ORDER DATED JANUARY 29, 1926 ON THE REPORT

Mycological Section.—Preliminary work on the Coffee Experimental Farm was carried out during the year. The Mysore Coffee Cess Bill has been since passed into Law, and Rules under the Regulation have also issued for regulating the collection and administration of the Cess realizations. Sanction has been accorded to the opening of the Coffee Experimental Station at Guntenaik Estate near Balehonnur. Government hope that as the result of this Experimental Station and of the scientific investigation of coffee diseases and analogous pests on Coffee Estates there will be a considerable development in this important industry in the near future.

PART I OF THE REPORT

Mycological Section. Coffee Experimental Station.—Preliminary work has been done in this connection. The area of 17 acres of growing coffee placed at the disposal of the Department has been worked up, to obtain correct figures of yield. Three harvests have thus been tabulated row by row.

A plan for manurial experiments has been laid down. Seeds from known heavy bearers have been collected from estates both in Mysore and Coorg and some 3,000 plants are ready in the nurseries for planting in the new area.

A part of the jungle has been cleared and temporary sheds erected for labour, out of funds (Rs. 2,000) generously placed at our disposal by the United Planters' Association, Southern India, for the purpose, and further final lay out, of the whole area of about 200 acres is now being worked up.

PART II OF THE REPORT

Coffee Investigations.—This can be grouped under three distinct heads, the first of which comes under remedial measures against diseases, the second, preliminary work in connection with the opening of the coffee experimental station and the third, a study of the cultivation methods and selection of seed for future plant-breeding purposes.

(i) As usual the disease that has received the greatest attention has been the black rot of coffee. Control measures carried on against this disease, were very encouraging last season and accurate data obtained on the yields of coffee in the sprayed plots, as compared with the unsprayed areas, indicated that there was a net saving of Rs. 100 per acre in the treated areas. The cost has been estimated at Rs. 9 to 11 per acre and the difference ought to be sufficiently convincing. Another proof of this recognition of the advantages of spraying is evinced by the greater demand for spraying in the coffee areas this season. All the applications for help in this direction could not be handled to the satisfaction of the applicants owing to the delay in the receipt of the materials for spraying. The stock of copper sulphate was received as late as the 3rd of June and between then and the outbreak of the monsoon, the period was very short. However, spraying work has been carried on at Koppa, Mudgere, Chikmagalur

and Saklespur, an area of nearly 8,000 bushes having been sprayed in all. In addition to the area treated by the Department, encouragement has been given to private owners to do the work on their own account and materials for spraying 35 acres of land have been sold to four planters and instructions given for work. One important feature about the spraying work this season has been the replacing of the resin-soap mixture by the casein-lime mixture which has given very satisfactory results till now. An article about the additional hosts for this pest was published in the Journal of the Agricultural and Experimental Union.

(ii) Preliminary work on the laying out of a coffee experimental station near Balehonnur was taken up and an area of 17 acres placed at the disposal of the Department by Mr. C. S. Crawford was worked up in detail with regard to the yields. All the rows were numbered and yields calculated row by row for the three harvests and tabulated gave us a favourable idea about the suitability of this land for experimental purposes. In consultation with the Agricultural Chemist, a plan of manurial experiments was drawn up and the plan was duly approved by the Director of Agriculture. The necessary quantities of manures have been obtained and the requisite labour for working this Farm has been secured—thanks to the generous gift of Rs. 2,000 by the United Planters' Association of Southern India. The extension of this plot into 200 acre Farm has been under contemplation and the preliminary surveys for isolating this area of land as a compact block, have been finished. The whole proposals are now awaiting the sanction of Government.

(iii) Extensive tours were made in the coffee growing areas of Mysore and Coorg with a view to studying the variations in the methods of cultivation practised in the different coffee-growing areas of Mysore and Coorg as well as investigating the possibility of finding out new or promising strains with a view to using them as a basis for future plant-breeding work. Over forty different strains have been selected and the plants are thriving well in the nursery in baskets. A portion of the jungle has been cut and the rest is being got ready as soon as possible for planting the basket seedlings. A preliminary study has also been made with regard to the validity of the opinion held by some of the planters with regard to the beneficial or adverse influence of the various shade trees on the estate. When the Farm should be fully established, a block will be set apart for testing the effects of the various shade trees not only as affecting the yield of coffee but studying their relation in the estates as alternate or auxiliary hosts of pests and fungus diseases.

It is expected that similar visits in the years to come will bring to light a number of useful strains which can serve as additional material for plant-breeding work.

Coffee Borer (Xylotrechus quadripes).—The handpicking of coffee borer was tried again on two estates on 5 acres in one and 8 acres in another. The total number of beetles caught from two estates numbered no less than 8,135. Dissections showed a very large percentage of the females had not laid eggs. The result of the work as judged by the number of trees pulled out from the experimental and check plots is not yet available as the dying trees are pulled out only in July. A great deal more information has to be collected before recommendations can be made to the planting community. For this purpose it is proposed to take up a whole estate this year where the entire area will be picked. An Indian planter has come forward to find a third of the expense, the department finding two-thirds, and it is hoped that work will be started on the estate next borer season.

THE BATTLE OF KALUVARDAKKAL

From Fort St. George came the ukase
 To hold a camp of Exercise ;
 The which we did, one short week end ;
 A concentrated enterprise—
 As all those heroes will admit
 Who bathed beneath the waterfall,
 Who scaled the impregnable Black Rock,
 Who ' fell ' at Kaluvardakkal.

The O. C. Group was umpire too,
 He gazed on us from dizzy heights ;
 With placid, Jovian mien he watched
 And criticized our pigmy fights,
 His was a sinecure indeed ;
 He did not toil, or spin, or tramp hard.
 (A rotten effort, I admit,
 But who *could* find a rhyme for——— ?)

The other officer we had
 Assumed the rank of G. O. C.
 He worked himself, he worked us too !
 A most untiring bloke was he.
 And woe betide the scrimshanker
 Who short sharp rushes tried to dodge,
 What made his rushes sharper still ?
 The unrelenting voice of———.

The ' A ' Reservist riflemen,
 Who charged with gruntings grossly grampian
 Were egged to stagger farther yet
 By caustic wit from Corporal———.
 The Lewis Gunners one and all
 Were slaughtered ere they'd had their fun
 (According to the umpire), but
 For the unslaughterable———.

Arms drill was quaint but wearying,
 One does get tired of hiking hipe !
 The criticism we received,
 Though doubtless true, seemed rather tripe.
 We stood, while our preceptor bawled,
 With rasp acquired in camp at Balham,
 Presenting arms for half an hour,
 Put through it by ' our Mr. —— '.

Arranging camp is thirsty work,
 Whence went the brew which comes from Pilsen ?
 It was a great mistake to send
 Two Hielanders like———and———,
 And yet—it could not be foreseen
 That such a choice would be so risky.
 We hoped they'd concentrate upon
 The produce of their country,——— !

Who stood in silence as we strove,
 Nor did by word or look evince
 Exactly what he thought of us?
 Our Staff Instructor, Sergeant———,
 I can't deal with the rank and file;
 It is high time I ceased this prattle.
 Some day, no doubt (I hope not soon),
 We'll have another gory¹ battle.

S. A. A.

¹ Substituted by censor.

A RUBBER SURVEY

BY

GEORGE O. MAY

(Concluded from page 797, issue of November 20, 1926)

The United States Secretary for Commerce offered no evidence in support of the higher production estimate, and it is noteworthy that later, in answer to questions regarding 1926, he again put forward the department's lower estimates of potential production, and that witnesses for the Rubber Association of America accepted the lower estimates as correct. Moreover, such authorities as the London *Economist* and the London and Cambridge Economic Service take the view that the only uncertainty is whether as much as 100 per cent can be exported.

The committee has adopted in its report both the lower departmental estimate and the Secretary's statement that potential output is 15 to 20 per cent in excess of standard, being apparently **QUITE UNCONSCIOUS OF ANY INCONSISTENCY BETWEEN THE TWO.**

It is difficult to understand how the Secretary could have failed to recognize the inconsistencies between the different parts of his testimony on a question which goes to the very root of the real problem, and on which he was moreover making a charge of misleading propaganda. Whether potential output with restriction completely removed—as it surely must be in the near future if it has not been already—is 100,000 tons more or less is a crucial question in considering the rubber outlook. That the Secretary should put forward seriously conflicting statements on this question without attempting to reconcile them **GREATLY DETRACTS FROM THE VALUE OF HIS EFFORTS TO ENLIGHTEN THE PEOPLE OF THE UNITED STATES** in regard to this very important problem.

In view of the committee's findings concerning the effect of restriction on supply, it is difficult to accept its conclusions as to the effect of restriction on price. The loss of production found to have occurred is clearly a wholly inadequate explanation of the rise in price from 14½ cents in the first quarter of restriction to the figure of \$1.09 which the committee uses. Nor is the acceptance of this finding made easier by the facts that the price has since fallen to sixty cents or lower, and that the committee attributes this fall to the action of the Secretary in calling on our people to economize in the use of rubber and to use substitutes. The obvious retort would be to say that, if the committee is right regarding the decline, the rise must be attributable mainly to our failure to economize earlier, notwithstanding that a shortage of rubber could be foreseen.

The extreme rise, like the earlier rise to \$1.21 in July 1925, was unwarranted, but may be regarded as one of the ordinary incidents of a

sensitive market, which in turn was attributable to the unexpectedly great and sustained demand for motor cars and hence for rubber in America, coupled with an increased demand from the rest of the world. The point may be illustrated by reference to a report on the prospective demand made, as recently as the spring of 1924, for the Rubber Association of America by a statistician of high repute. As a rough check of results reached by more detailed methods, he used the assumption that the demand would be increased by twenty tons for every thousand cars added to the registration. In making his computation he assumed that the registration would increase by eight millions in seven years; and of the resulting increase in annual consumption of rubber of 160,000 tons which he allowed for he assigned 52,000 tons to the first two years. Actually the increase of registration in two years is nearly five millions, implying an increase of 100,000 tons in the annual consumption of rubber.

Those responsible for rubber control can scarcely be blamed for failing to foresee these developments when control was instituted in 1922. It would, however, seem to be a fair criticism that by the middle of last year it had become apparent that restriction was no longer necessary to maintain rubber at the levels contemplated by the scheme and that therefore it would have been the part of wisdom to remove restrictions when a runaway market began to develop in July. Such action would not have affected the rubber situation adversely and would have greatly strengthened the position of the rubber control. It would have obviated any possibility of complaints, such as have since been freely and not unjustly made, that the control has not been conducted in accord with the spirit of the scheme and the explanations of its purpose to consumers.

III

The findings in regard to the cost and the fair price of rubber are of twofold importance, since they bear, not only on the reasonableness of the attitude of the growers in the past, but also on the attractiveness of the industry to American capital in the future.

The departmental reports in a paragraph quoted to the committee by the Secretary, mentioned a cost of sixteen to seventeen cents per pound for rubber landed in America, and this may be the basis for the committee's figure of eighteen cents. That report, however, indicated that this estimate, first, was based on a production of 400 pounds per acre, the average production being, as indicated by the report, about 320 pounds; secondly, was exclusive of bonuses to the managers—which the report elsewhere said were practically a necessity—and certain taxes; and, thirdly, was based on exchange at \$ 4.30 to the pound, so that the figure must be increased by about 13 per cent with exchange practically at parity.

In another place the report, speaking of a group of companies which was 'one of the best guides to present-day costs,' pointed out that 'despite the drastic economies effected' the cost per pound in 1922 was 11.9 pence, which is equivalent at present rates to just about twenty-four cents.

The president of the one American company which has large plantations estimates the cost per pound (excluding transportation) at twenty-five cents, and said he believed this figure would be a fair figure for the large British companies.

It is difficult to see how, in the face of this evidence, the committee could place cost much below twenty-five cents, if cost was intended to

include all expenditures which have to be met before there is a profit available for return on investment.

The committee supports its finding that thirty-six cents a pound is a fair price to cover both cost and return on capital by two arguments: first, that the hearings showed such a price would yield an annual return to the rubber growers of 15 to 25 per cent on invested capital, even in the case of plantations with higher production costs: second, that the growers admitted it was a fair price and that it was the objective of the Stevenson plan.

The first question is: What does the committee (and the Secretary, whom it follows closely) mean by an annual return? Does it contemplate a return during the necessary years of growth, which will be added to the investment on which the return is to be computed when production begins? If not, then a return of 15 per cent in productive years is grossly inadequate. Experience shows that established profit-earning businesses are constantly being sold in the United States on a basis which gives an immediate profit of 15 per cent per annum on the purchase price. Certainly a lower return could not be said to be adequate for a hazardous business carried on thousands of miles away in a tropical country scourged by malaria.

Yet on the evidence of the department's own report,¹ showing £70 (say, 340 dollars) spread over six years as the average present-day cost of bringing land into bearing, and adding as a part of the investment a return at 15 per cent during those six years on the amount from time to time expended, we find that the sum needed to give in any real sense an annual return of 15 per cent is about eighty-five dollars per acre per annum, which on an average yield of, say, 320 tons means over twenty-six cents per pound. Thus, the price which would yield even 15 per cent to an average cost plantation with an average production would, upon the evidence, be in the neighbourhood of fifty cents. The low-cost plantations could earn 15 per cent, with a substantially lower price, but if the yield were raised to the 25 per cent mentioned by the committee, or the case of the high-cost plantation considered, the figure would be much higher. **IT IS SAFE TO SAY THAT OVER THE PERIOD OF RESTRICTION THE GROWERS RECEIVED A LOWER AVERAGE PRICE PER POUND THAN ANY AMERICAN JUDICIAL TRIBUNAL WOULD, UPON THE EVIDENCE, HAVE FELT JUSTIFIED IN FIXING AS A 'FAIR PRICE'.**

There remains the argument that thirty-six cents was put forward as the objective of the Stevenson Scheme and that assurances were given that it would not be exceeded. Undoubtedly the committee spoke of eighteen pence (the equivalent of thirty-six cents) as a price which would leave a satisfactory margin over the cost for return on capital, but surely a 'fair price' fixed for the purposes of a scheme, as the limit beyond which a further increase should not be induced by restriction, should in principle be well below the fair price beyond which any increase would be unfair to consumers. The point on which the Secretary and the committee lay a curious stress seems to rest on some confusion of thought.

AMERICAN CONSUMERS CAN HARDLY COMPLAIN THAT A PRICE IS UNFAIR unless it is clearly above the level at which production would be an attractive opportunity for American capital, and on the evidence thirty-six cents is far below that level.

Again, one regrets that the restrictions were not lifted when prices of rubber went far beyond the thirty-six cent limit in the spring of 1925. But, while strong criticisms of this error of judgment might be justified, it hardly forms a basis on which charges of bad faith against the growers can

¹ See 'The Plantation Rubber Industry in the Middle East,' p. 25.

be maintained. It is scarcely conceivable that individual growers, or a small group of growers, should, without receiving any consideration, have undertaken to give assurances that for an indefinite period of time the price of rubber would not be allowed to go higher than thirty-six cents per pound, or that our manufacturers would be content to rely on such assurances. Evidently, however, there was loose talk on the point, and doubtless genuine misunderstandings in some minds resulted from it.

IV

Summing up the impression one derives from an examination of the report and the evidence, the Secretary was evidently keenly alive to the fact that a rubber shortage was impending, and to the desirability of bringing to the attention of the American people, in a striking way, the need of some action to forestall this condition. This he has undoubtedly done.

If in doing so he has advanced theories and contentions which upon the evidence of his department seem incapable of being sustained, this merely confirms what some of the most ardent admirers of his ability and achievements have reluctantly concluded: that his undeniably great gifts lie rather in the fields of organization of effort and of public opinion than in the fields of economics and the dispassionate analysis of controversial facts. His plea for a policy of freedom of raw materials from governmental control suffers from a too strongly nationalistic approach, from an overstatement of the case in specific instances, and from a failure to anticipate the obvious retort upon our own protectionist policies and to set forth the economic grounds upon which he distinguishes between the two policies and bases his appeal.

THE EVIDENCE FAILS TO DEMONSTRATE THAT THE RESTRICTION SCHEME WAS EITHER VERY BENEFICIAL TO GROWERS OR HIGHLY INJURIOUS TO CONSUMERS. It rather raises doubt whether the benefits to those whom it was intended to help were sufficient to justify its adoption.

The continuance of control after the rise of last summer may legitimately be criticized, but nothing in the nature of a serious grievance against the growers seems to be established. They have, of course, conducted their operations with a view to gain, and not from altruistic motives; but, viewing the whole subject in perspective, and taking one year with another, it is evident that they have provided the raw materials upon which a major development of our industry and comfort is based, at prices which would not have been attractive to our own capital.

The problem of rubber supply is a serious one and may be said to have entered into a new phase during 1925. It is fortunate that the change should have come at a time of prosperity so that its effects were not of serious consequence to our manufacturers or to our consumers.

Our people have genius for economy in production, and our national vice is extravagance in consumption. Stimulation of the one and a slight curb on the other should suffice to bring about a satisfactory relation between demand and supply during the years immediately ahead, in which no great increase of production can be expected. The rise in prices will afford such a stimulation and such a check, and should at the same time encourage the plantation of new areas which will in the course of years provide for the natural expansion of demand.

If Americans find in the field an attractive opportunity for the employment of some of the country's abundant supply of capital, well and good; the record certainly establishes no case for our entering the field on an uncommercial basis.

EXPORTS OF COFFEE, RUBBER & TEA FROM SOUTH INDIAN PORTS DURING OCTOBER, 1926

From	To ports in India	Ceylon	United Kingdom	Europe (excluding United Kingdom)	Asia (excluding India and Ceylon)	Africa	America	Australia
<i>Coffee—</i>								
Madras	291	...	...	230	6	...	...	...
Calicut	126	...	...	...	...	...	...	...
Mangalore	271	...	...	6,010	8	...	...	...
Bombay	...	...	...	...	35	24	...	...
Total	688	...	...	6,240	49	24	...	...
Previously	12,424	...	27,071	39,202	23,117	42	251	7,527
Total cwt.s. since 1-1-26.	13,112	...	27,071	45,442	23,166	66	251	7,527
<i>Rubber—</i>								
Madras	...	...	...	...	500	...	...	...
Calicut	...	168,352	107,225	...	...	...	...	...
Cochin	...	250,713	306,850	17,965	...	...	205,010	...
Tellicherry	...	11,732	18,010	...	...	...	...	...
Tuticorin	...	111,004	...	...	...	...	...	...
Alleppey	...	381,273	47,670	...	...	...	11,200	17,920
Total	...	923,074	479,755	17,965	500	...	216,210	17,920
Previously	440	4,413,005	3,381,408	139,926	224	...	1,304,628	163,945
Total lbs. since 1-1-26.	440	5,336,079	3,861,163	157,891	724	...	1,520,838	181,865
<i>Tea—</i>								
Madras	12,828	...	254,204	680	...	...	...	...
Calicut	49,303	25,098	1,098,263	96	...	3,225	5,390	...
Cochin	24,398	2,995	775,707	83	...	...	...	...
Mangalore	...	...	5,810	200	3,640	...	...	...
Tellicherry	...	7,845	129,503	...	...	...	...	...
Tuticorin	...	219,086	989,813	...	...	...	...	...
Alleppey	3,618	54,808	99,356	...	...	...	...	...
Total	90,147	309,832	3,352,656	1,059	3,640	3,225	5,390	...
Previously	380,898	2,466,445	20,035,263	8,403	4,228	8,080	15,880	500
Total lbs. since 1-4-26.	471,045	2,776,277	23,387,919	9,462	7,868	11,305	21,270	500

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending Oct. 30, 1926	January 1 to Oct. 30, 1926	January 1 to Oct. 30, 1925
(A) TEA (WEEKS ENDING OCTOBER 30 & NOVEMBER 6 & 13 1926)				s. d.	s. d.	s. d.
			N. India.	1 4.86	1 8.00	1 5.19
			S. India	a1 3.15	b1 7.33	c1 5.32
			Ceylon...	1 7.24	1 8.38	1 7.76
			Java ...	1 1.04	1 4.20	1 0.69
			Sumatra.	1 1.34	1 4.49	1 4.21
			Nyassa-land.	Nil.	1 5.42	1 0.91
			Total ...	d1 5.20	e1 7.69	f1 5.64
N.B.—Bracketed numbers after the Estate names indicate to which of these 3 weeks each sale relates.						
(a) Anamalais—		s. d.	District	Week ending Nov. 6, 1926	January 1 to Nov. 6, 1926	January 1 to Nov. 6, 1925
Pachimallai (30) ...	71	1 5 $\frac{1}{4}$		s. d.	s. d.	s. d.
Periakaramalai (30)...	253	1 5	N. India.	1 4.83	1 7.90	1 5.23
Selaliparai (13) ...	113	1 4 $\frac{3}{4}$	S. India	g1 3.75	h1 7.26	i1 5.36
Caradigoody (13) ...	100	1 4 $\frac{3}{4}$	Ceylon ...	1 7.01	1 8.35	1 7.81
Do. (6) ...	88	1 4 $\frac{3}{4}$	Java ...	1 1.00	1 4.17	1 0.68
Selaliparai (30) ...	141	1 4 $\frac{1}{4}$	Sumatra.	Nil.	1 4.49	1 4.20
Pannimade (30) ...	154	1 4	Nyassa-land.	Nil.	1 5.42	1 0.91
(b) Central Travancore			Total ...	j1 5.10	k1 7.64	l1 5.68
Cheenthalar (13) ...	131	1 4 $\frac{1}{2}$				
Pirmed (13) ...	131	1 4 $\frac{1}{2}$	District	Week ending Nov. 13, 1926	January 1 to Nov. 13, 1926	January 1 to Nov. 13, 1925
Glenmary (30) ...	103	1 4 $\frac{1}{2}$		s. d.	s. d.	s. d.
Carda Goody (30) ...	97	1 4 $\frac{1}{2}$	N. India.	1 4.84	1 7.90	1 5.28
White Hills (30) ...	87	1 4 $\frac{1}{4}$	S. India.	m1 6.02	n1 7.24	o1 5.39
Pirmed (6) ...	115	1 4	Ceylon ...	1 7.31	1 8.33	1 7.85
Fairfield (30) ...	98	1 4	Java ...	1 1.48	1 4.13	1 0.70
(c) Kanan Devans—			Sumatra.	1 6.59	1 4.54	1 4.33
Yellapatty (13) ...	169	1 7 $\frac{1}{2}$	Nyassa-land.	Nil.	1 5.42	1 0.93
Chunduvurrai (13) ...	167	1 7 $\frac{1}{2}$	Total ...	p1 5.29	q1 7.60	r1 5.93
Gundunallay (13) ...	104	1 7				
Guderal (13) ...	149	1 6 $\frac{3}{4}$	N. India.	1 4.84	1 7.90	1 5.28
Vagavurrai (13) ...	108	1 6 $\frac{3}{4}$	S. India.	m1 6.02	n1 7.24	o1 5.39
Perriavurrai (13) ...	161	1 5 $\frac{3}{4}$	Ceylon ...	1 7.31	1 8.33	1 7.85
Guderal (6) ...	160	1 5 $\frac{3}{4}$	Java ...	1 1.48	1 4.13	1 0.70
(d) Mundakayam—			Sumatra.	1 6.59	1 4.54	1 4.33
Yendayar (6) ...	92	1 4	Nyassa-land.	Nil.	1 5.42	1 0.93
Do. (30) ...	94	1 2 $\frac{1}{4}$	Total ...	p1 5.29	q1 7.60	r1 5.93
(e) Niligiris—						
Prospect (30) ...	178	1 9	N. India.	1 4.84	1 7.90	1 5.28
Do. (6) ...	145	1 8 $\frac{1}{2}$	S. India.	m1 6.02	n1 7.24	o1 5.39
(f) Niligiri-Wynaad—			Ceylon ...	1 7.31	1 8.33	1 7.85
Seaforth (30) ...	129	1 3	Java ...	1 1.48	1 4.13	1 0.70
Barwood (30) ...	43	1 3	Sumatra.	1 6.59	1 4.54	1 4.33
Woodbriar (30) ...	74	1 2 $\frac{3}{4}$	Nyassa-land.	Nil.	1 5.42	1 0.93
(g) South Travancore—			Total ...	p1 5.29	q1 7.60	r1 5.93
Poonmudi (30) ...	61	1 2 $\frac{3}{4}$				
Merchiston (6) ...	53	1 1 $\frac{1}{4}$	N. India.	1 4.84	1 7.90	1 5.28
Do. (30) ...	74	1 1	S. India.	m1 6.02	n1 7.24	o1 5.39
(h) Wynaad—			Ceylon ...	1 7.31	1 8.33	1 7.85
Erramaculla (30) ...	284	1 2	Java ...	1 1.48	1 4.13	1 0.70
Do. (6) ...	59	1 2	Sumatra.	1 6.59	1 4.54	1 4.33
Elstone (30) ...	119	1 1 $\frac{1}{2}$	Nyassa-land.	Nil.	1 5.42	1 0.93
Fringford (30) ...	98	1 1 $\frac{1}{4}$	Total ...	p1 5.29	q1 7.60	r1 5.93
Chulika (30) ...	96	1 1 $\frac{1}{4}$				

N.B.—The number of packages on which the South Indian averages are based is given in the foot-note at the end of the page.

(B) COFFEE

SPECIAL CABLE, LONDON, DECEMBER 8, 1926
'A' QUALITY 165s. MARKET FIRM.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, December 7, 1926, was 18 $\frac{1}{4}$ d.

a 5,913	b 154,308	c 159,144	d 87,014	e 2,835,255	f 2,662,589
g 2,795	h 157,103	i 164,461	j 78,561	k 2,913,816	l 2,727,182
m 1,507	n 158,610	o 166,761	p 79,322	q 2,993,138	r 2,794,639

(b) *Precis of Reports on the London Market received on Monday, December 6, and covering the seven days ending Tuesday, November 16 :—*

1. *Tea*.—The rise of $2\frac{1}{4}d.$, which as indicated on the previous page was realized in the Southern Indian average during the week ended 13th ultimo, though based on very moderate offerings at the Auctions, still marked a considerable firming up of the market owing to an active competition for all grades. The Indian Tea Association estimates that the Northern India crop to the end of October 1926 was 315 million pounds as against 288 $\frac{3}{4}$ million pounds and 283 million pounds for the corresponding periods of 1925 and 1924. The stock of all tea in bond in the United Kingdom on October 31st was 186,861,000 lbs. as against 181,676,000 lbs. and 148,733,000 lbs. respectively on the same date in 1925 and 1924.

2. *Rubber*.—London stocks increased by 254 tons to 43,299 tons during the week given under review ; and the closing 'spot' quotation was $20\frac{1}{4}d.$ with premia of $\frac{3}{4}d.$, $1\frac{1}{4}d.$, and $1\frac{1}{2}d.$ respectively for deliveries during the first quarter 1926, the second quarter 1926, and throughout 1927.

3. *Coffee*.—No East Indians were on offer at the Public Auctions ; but the few East Indian lots sold privately are reported to have realized high prices. The stocks in bags of African, Indian, and other kinds respectively on November 13th were 19,908, 7,570, and 59,762 as against 34,396, 27,067 and 90,736 on the corresponding date last year.

4. *Pepper*.—The market remains firm with fair Tellicherry quoted at 13d. January—March delivery is selling at a considerable premium, so that it would seem that local producers have good prospects ahead.

II. Weekly Rainfall Statement

From Sunday, November 28, 1926 to Saturday, December 4, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	N.R.	73·91	N.R.	20. Naduvattam	...	94·22	94·22
2. Kalthuritty.	...	114·35	114·35	21. Coonoor	...	30·82	30·82
3. Kallar Bridge.	...	130·77	130·77	22. Kotagiri	...	47·19	47·19
4. Tenmalai	111·43	111·43	23. Ootacamund	...	42·71	42·71
5. Mundakayam.	...	150·44	150·44	24. Yercaud	...	44·79	44·79
6. Peermade	178·21	178·21	25. Devala	...	N.R.	N.R.
7. Twyford	197·89	197·89	26. Gudalur	...	78·83	78·83
8. V'periyar	79·92	79·92	27. CALICUT	...	123·31	123·31
9. Kalaar	195·48	195·48	28. Kuttiyadi	...	163·40	163·40
10. Chittuvurrai	...	40·16	40·16	29. Vayittiri	...	185·19	185·19
11. BODI'KANUR	...	23·14	23·14	30. Manantoddi.	...	105·20	105·20
12. COCHIN	...	120·82	120·82	31. Billigiris	...	49·96	49·96
13. Mooply Valley.	...	129·57	129·57	32. Sidapur	...	74·44	74·44
14. Pachaimalai.	...	123·10	123·10	33. Pollibetta	...	97·29	97·29
15. Mudis	231·40	231·40	34. Somwarpett.	...	70·56	70·56
16. Nell'pathy...	...	99·36	99·36	35. Ballupete	...	65·47	N.R.
17. POLLACHIE	...	31·32	31·32	36. MANGALORE	...	114·70	114·70
18. Manjeri	136·25	136·25	37. MADRAS	...	29·22	29·22
19. Nilambur	118·74	118·74				

W=During the week.

P=Previously. N. R.=No return received.
(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, December 9, 1926)

(A) EXCHANGE

The market during the last week has not seen very much business doing, but there has certainly been more passing than in most weeks recently. To all intents and purposes the Coal Strike is over and the Freight position is a little easier. It is reported from Calcutta that a fair line of Bills was placed February/August in a string at the end of last week, but it is significant that they did not have any appreciable effect on the market quoted rates. Forward rates are very steady indeed and the undertone is good but the market for Near positions is very uncertain. Ten days ago, when Reverse Councils were sold by Government in Bombay, it was thought that the amount was only small, but latest advices go to show that the amount was very much larger than anticipated, and this is having an appreciable effect on the Near Exchange rates which are weaker. Closing quotations are sellers of T.T. 1s. 5 3/4d. December, 1s. 5 25/32d. first half and 1s. 5 13/16d. second half January, 1s. 5 27/32d. February/April and 1s. 5 13/16d. May/September. There are buyers of three months Approved Credits for the mail at 1s. 6 1/16d. and good buyers for the rest of December at 1s. 6 3/32d. Bills can be placed all January at 1s. 6 1/8d. and February/September at 1s. 6 5/32d. The Franc has again improved very much from 130½ to 122¾. The Pound Sterling in New York is practically unchanged at 4·84½.

(B) MONEY

Is still going out for Burma, but there is no other enquiry. The rates for Inter-Bank money are again unchanged, lenders quoting 2 per cent for Call, 2½ per cent for three months, 3 per cent for six months and 4 per cent for twelve months, and practically nothing doing. The Imperial Bank of India rate is unchanged at 4 per cent and the percentage of cash to liabilities is 40·04 as compared with 41·81 last week,

IV. Selected Madras Market Quotations

For the week ending Wednesday, December 8, 1920

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10½
Bank of Mysore Rs. 100	165	170
Indian Banks (Rs. 100) Rs. 50	66	70
Indian Banks (Rs. 100) Rs. 10	13½	13½
Central Bank (Rs. 50) Rs. 25	30	31
Imperial Bank of India (Rs. 500)	1500	1510
" " (Rs. 125)	370	375
Chartered Bank £5	£ 19	£ 20
Eastern Bank (£10) £5	£ 6	£ 6-5-0
Mercantile Bank (£25-A) £12½	£ 30	£ 31
" " (£25-B) £12½	£ 30	£ 31
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-10-
P. and O. Bank £10	£ 10-5-0	£ 10-15-
MILLS		
Bangalore W. C. and S. Ord. (Rs. 100)	...	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	94	98
Buckingham and Carnatic Ord. Rs. 100	...	19½
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	124	...
Coimbatore Rs. 100	150	160
Coimbatore Mills Rs. 85	75	80
Gokaks Rs. 100	108	...
Jaduras Rs. 100	415	...
INDUSTRIALS		
Deccan Sugar Ord. Rs. 500	900	950
Deccan Sugar 7 per cent. Cum. Prefs. Rs. 100	110	112½
E. I. Distilleries and Sugar Factories Ord. £0-16-0	15s.	17
E. I. D. 7 per cent. Cum. Prefs. £1 (Madras Register.)	13-2-0	...
Indian Aluminiums Rs. 100	57½ x.D.	62½ x.D.
Malabar Match (Rs. 10) Rs. 7	1	1½
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9	9½
W. E. Smith Ord. Rs. 100	47	5
W. E. Smith 6 per cent. Prefs. Rs. 100	85	8
Spencers Ord. Rs. 100	142½ x.D.	150 x.D.
Spencers 6 per cent. Prefs. Rs. 100	97	100
Spencers 7½ per cent. 2nd Prefs. Rs. 100	120	122½
Tata Iron and Steel Ord. Rs. 75	65	69
" " 7½ per cent. 2nd Prefs. (Rs. 100)	79	81
United Breweries Ord. Rs. 75	135	...
United Breweries 6 per cent. Prefs. Rs. 100	92½	...
PLANTING		
Cochins Rs. 15	45	51
Eddivannas Rs. 15	29½	31
Kalajas (Rs. 15) Rs. 9	8½	9
Kinalurs Rs. 10	32½	34
Kuttiadis Rs. 15	19½ x.D.	21½ x.D.
Malankaras Rs. 30	112 c.D.	115 c.D.
Peermades Ord. Rs. 10	27	28½
Peria Karamalais Rs. 15	45	46
Periasholas Rs. 10	6	7
Periyars Rs. 10	21½	22½
Pudukads Rs. 15	52	60
Rockwoods Rs. 10	4	5
Thodapuzhas Rs. 10	31	33
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22½	...	20
United Nilgiris Rs. 100	115	117½
Vellamalais (Rs. 15) Rs. 13	14½ x.R.	15½ x.R.

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 51] SAT., DECEMBER 18, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	859	District Association Meetings—	
Aylmer F. Martin ...	861	A. Nilgri Wynaad ...	866
Personalia ...	863	B. Mundakayam ...	868
Rubber in Africa ...	864	Commercial and Meteorological.	869
Letters to Editor—			
The U.P.A.S.C. Annual Meet.	865		

EDITORIAL NOTES

In the course of his address on the 6th instant to the Associated Chambers of Commerce of India and Ceylon, His Excellency the Viceroy made the following appreciative reference to the Organization for safeguarding their interests which Indian Tea exporters have built up without extraneous aid :—

‘ The Government of India still receive complaints about the adulteration and bad quality of certain Indian produce. The subject has frequently been discussed with Chambers of Commerce, and it has usually been claimed, on the one hand, that it is not the business of the Government to interfere, and, on the other, that the trade cannot or will not set its house in order. Rarely, therefore, is anything done. In the case of coal the Government stepped in and established a Coal-grading Board, but they did so because the need for action was urgent and on the understanding that, as soon as possible, the coal industry would organize itself and assume oversight of the Board. In another case, that of Indian wheat, importers in England insisted on definite standards of quality, but these two cases are exceptions, and I suspect that the real remedy lies in efficient organization by the trade itself, an organization aimed at maintaining quality and, therefore, also of value and price. ‘ The Indian Tea Association has shown how a trade can benefit by organizing itself, and it might be worth while for other trades to consider whether they should not adopt the same line of policy and develop some corporate body in India, capable of negotiating on equal terms with foreign Associations of importers. Funds would of course be required. The Tea Association has provided itself with funds by means of the Indian tea cess, a very small cess imposed on tea exported from India. The cess is collected by the Customs officers. The profits of it are handed over to the Indian Tea Association. Similar cesses exist in the case of lac and cotton. The Government, of course, must be careful about multiplying cesses of this kind, and they have to see that an intolerable burden is not placed on their Customs officers. It is also essential that the cess should be small, and should not encroach in any way upon the

Government's own field of taxation, but, provided these two conditions are fulfilled, I see no reason why this system of small cesses might not be expanded with advantage, and I can safely promise that, if any trade organizes itself in the way I have suggested, and then applies to the Government to collect for it a small cess upon its own products, when exported from the country, its proposals will meet with careful and sympathetic consideration from the Government.'

The problem is also receiving attention in Jamaica; for the Report received by this Mail of the Half-Yearly Meeting of the Jamaica Agricultural Society held on July 22, 1926 shows that the Governor, His Excellency Sir Edward Stubbs, K.C.M.G., made the following statement in the course of his Presidential Speech:—'What I have seen here since my arrival confirms me in the view that Jamaica depends on agriculture, and so I desire to occupy your time, for a few minutes, in referring to the Agricultural Produce Law (prescribing that all coffee for export must be pulped and washed. Ed). Jamaica is in the fortunate position of being a very fertile island, but it suffers from the disadvantage that it produces nothing that could not be produced in other tropical lands. We want to work up a position for Jamaica so that when we put our cocoa or our coffee or other products on the markets, they will be accepted at once as products of a first class quality (applause). This is the object for which the Law has been passed. Undoubtedly the Law has its opponents; and it is only natural that it should, because it seeks to make a change at once and this cannot be done in almost anything without causing a certain amount of inconvenience at first. The Law comes in force nominally on the first of August, but it will be recognized at once that it will be impossible to enforce the various provisions contained in it at that time. We propose to proceed quietly and carefully. It has been impressed upon me that when the Law comes into active operation, the two principle products affected, will be coffee and cocoa. I am absolutely convinced that, as regards coffee, the law is right, and should be enforced as soon as it is possible to do so without entailing undue hardships on the growers. I do not think there should be much difficulty: the necessary pulping machinery is not expensive and is not difficult to obtain. I trust the persons who have not the machinery already, will take the opportunity of obtaining the machinery and so help on the object at which the Law aims—the improvement of the quality of the product.'

The Labour Department The Director of the Labour Department advises us that the H. Narasipur Agent of the Mysore Division will in future be known as the Arkalgud Agent since he resides in, and has his Office at, the latter place.

The Future of Rubber The latest authentic indication of the attitude of the Colonial Office towards the Stevenson Restriction Scheme is afforded by the following telegram which the Government of Ceylon received last week from the Secretary of State for the Colonies in connection with the debate on a proposal brought forward by a member of the Legislative Council that Ceylon should no longer adhere to the provisions of the Restriction Scheme:—

'If Ceylon were to abandon restriction it would have a most serious effect on the policy to be adopted by Malaya and among the British estates in the East Indies, whom I could not press to continue by themselves. The results would be very serious. An immediate fall in prices, from which the Ceylon grower would suffer to the same degree as others, would be deeply resented, as it would have a bad effect on the whole future of the industry.'

'I am advised that Ceylon producers no longer have an advantage in costs over other producing countries, though this is not generally realized in Ceylon. The maintenance of the prosperous conditions of rubber producers in the Empire is a matter of real importance from the Empire point of view, since our aim, urged on us by producers and users like, is a stable price. Stability must be sought at a profitable level, adequate to encourage extended cultivation and the promotion of research.

'At the time of the publication of the new scale the assurance was given that it would be unaltered for a year, in any case, till next November. I cannot accept any alteration, but before any extension of the period of the present scheme, I will give full weight to any proposals the Ceylon industry may put forward and shall be grateful for these at a very early date.'

OBITUARY

AYLMER FFULKE MARTIN

'Toby' Martin, whose death we had the melancholy duty of recording in a Stop Press paragraph in our issue last week, was typically one of those Pioneer planters whose lives have proved that the jack of all trades is not necessarily the master of none. He and his type have realized in their persons the ideal of a Planter as one who knows everything of something and something of almost everything else. Thus his friends knew 'Toby' not only as a expert Planter; but also a Mason, a Shikari, an Iconographist, and an Ethnologist of no mean repute.

The following touching tribute has been sent to us by one who was perhaps his most intimate personal friend:—

'Perhaps the two best qualities a man can have are courage and kindness. To put a bold front on the troubles of life, and to have active goodwill towards one's fellows, make life better for a man; and much better for his friends and neighbours. Few men had these qualities so constant and steady as dear old 'Toby' Martin who died on December 4.

All Planters who knew him, and they are nearly all the Planters of South India, will lament him; and there are hundreds of Indians—I don't think it is an exaggeration to say thousands—who will hear of his death with sorrow.

Many a white man has lived his life and laid his bones in India. But few with such a zest and goodwill as 'Toby' Martin. For whether he was working, or hunting in the hills, or living out in the pattikard in the low country, he liked it all. Life was never dull or wearisome or sordid to him. The glamour of India was on him till the day he died; and could he have chosen, he would have ended almost when and where he did. We have lost a counsellor, we have all lost a friend; and the world is deprived of one of those sparks of inextinguishable gaiety which are almost priceless.

To those he leaves behind we offer our deep sympathy.'

It is surely no small thing to have lived a life that can evoke such a spontaneous tribute as the above. Coming obviously straight from the heart of one who feels most poignantly the sudden death of his friend, it seems to say most admirably all there is to be said on such an occasion when the thoughts of those most closely affected 'do often lie too deep for

tears.' We would, therefore, merely supplement the tribute of our Correspondent by placing on permanent record a few biographical details which we are sure our Readers will be glad to have.

'Toby' was born in 1864 at Cherapunji in the Province of Bengal where his father was in the Educational Service; received his education at Foyle College, Londonderry and Portora Royal School, Enniskillen; and returned to India in 1882 to his uncle Dr. Charles Martin, Mus. Doc., the then Collector of Tanjore. In the following year he bought a property of his own in the High range and opened it up as Chittavurrai Estate; taking up the cultivation of Coffee and Chinchona as one of a small body of pioneer private Proprietors who did not number in all more than twelve, excluding the personnel of the Travancore Land Planting and Agricultural Society, Ltd., which had been floated chiefly by the Civil Servants of Madras. Even that small number was reduced towards the end of the decade when Chinchona ceased to pay; and the next fillip to planting came in 1894-96, when the North and South Sylhet Tea Companies bought out the Agricultural Society's shareholders and commenced vigorously to open up in tea. In 1895 'Toby' himself sold Chittavurrai to Messrs. James Finlay & Co., in whose service he remained till the day of his death, with the exception of the period between 1914 and 1920 when he was Director of The Labour Department of the U.P.A.S.I. The Company early recognized his outstanding merit, and periods of special duties accordingly alternated with estate routine. In 1901, for example, he was deputed to Java to obtain information regarding high grade Ledgeriana Bark, which his Company proposed to substitute for the varieties then grown, and in 1903 and the succeeding years, with Head Quarters successively at Trichinopoly, Madura and Srivilliputtur, he assumed responsibility for the recruitment of the labour required for the large estate acreage which the K. D. H.P. Co. owned. In 1906-07 he was first of all Vice-Chairman and later Chairman of the U.P.A.S.I., and was once again elected Joint Vice-Chairman of the Association with Mr. E. F. Barber in 1911-12. On the expiry of his term as Director of the Labour Department in 1920, he returned to Messrs. James Finlay and Company's service, and from then until the day of his death remained on Chundavurrai Estate.

But, as indicated earlier in this Article, 'Toby's' activities were by no means limited to his professional work. He made a special study of the customs and habits of the Muduvar aborigines of Travancore. He was keenly interested in the traits of the bison, and for the purpose of intensive observation kept—as perhaps few if any other men can have done—a full grown specimen in captivity under his immediate eye. He was one of the founders in 1899 of the Kundale Hounds; which at that period were employed to 'start' Sambhar which the hunters followed on foot and finished off with knives. He was the first Worshipful Master of the Masonic Lodge 'Heather' (Scottish Constitution) which was founded at Munnar in 1902; and was subsequently re-elected Master on several occasions besides being connected with Lodge 'Faith, Hope, and Charity' Ootacamund, and Lodge 'Rock,' Trichinopoly (both English Constitution) for many years. Truly it might be said of him *Nihil quod tetigit non ornavit*.

'Toby' married in 1890 Violet, daughter of J. W. Minchin one of the pioneer Planters of Wynaad. To her, her son in the Indian Police, and her two daughters, in their great bereavement, will be tendered unreservedly the heartfelt sympathy of the many, his friends and even his acquaintances, who by reason of his untimely death are to-day labouring under a sense of almost irreparable loss.

PERSONALIA

ARRIVALS

MR. A. D. VINCENT and MR. LIPP, a new assistant, have just arrived from Home and gone to the Kutikul Estate, Mundakayam.

MR. and MRS. LUMSDEN EGAN of the Kotada Estate, Nilgiris, are passing through Madras to-day on their way back from Home.

Amongst the arrivals at Colombo this week by the S. S. 'Herefordshire' were CAPT. DINSDALE who is joining Messrs. Harrisons and Crosfield, Ltd.; MAJOR C. H. BROCK, O.B.E., V.D., the Director of the Labour Department, and MISS BROCK; and CAPT. CURRIE, Adjutant of the S. P. M. R., who was accompanied by his wife.

MR. JAMES STANES and MR. NORMAN STANES who also returned by the same opportunity are staying a few days in Ceylon before returning to Sutton Estate on the Nilgiri Hills.

DEPARTURE

MR. and MRS. J. S. NICOLLS—the latter, we are glad to say, quite recovered from her recent indisposition—passed through Madras yesterday *en route* from Devarshola to Colombo where they embark for Home.

OTHER PLANTING NEWS

We regret to learn that the No. 2 Factory at Cheenthalaar Estate, Peermade, was burnt to the ground on Monday last.

MR. R. FOWKE, Chairman; Mr. C. R. T. CONGREVE, M.L.C., Planting Member; Messrs. B. M. BEHR, A. C. COTTON, C. LAKE, and H. J. WALMESLEY, Executive Committee Members; and MAJOR C. H. BROCK, O.B.E., V.D., Director of the Labour Department; are attending a meeting of the Executive Committee in Madras to-day.

MR. and MRS. H. D. PATCH and MR. J. A. RICHARDSON of Cochin; MR. and MRS. R. P. ROISSIER of Fairfield, Peermade; and Mr. and MRS. J. S. WILKIE of Glenmary Estate, Peermade, arrived yesterday in Madras.

MR. E. C. SYLVESTER of Munjamullai Estate, Vandiperiyar, returned to Madras yesterday after a holiday in Ceylon.

MR. J. J. MURPHY of Yendayar Estate, Mundakayam, has arrived for the racing season in Madras.

A paragraph in 'Personalia' last week may have unwittingly given the impression that MR. and MRS. G. A. MARSH have recently been residing on the Puthutotam Estate. MR. MARSH has not been living on that Estate since MR. E. N. HOUSE returned from War Service in April 1919.

We note that MR. J. S. NICOLL's Nicaragua (J. T. Brown Up) just failed by a short head to carry off one of the prizes in the Espom Plate which was run for on the First Day of this Season's racing in Madras. At the Second Meeting, i.e. on Saturday last, MESSRS. J. O. F. MAURICE'S and W. R. WRIGHT'S Bacchante came in seventh in the race for The New Market Plate.

Our readers will regret that greater success did not reward the sporting efforts of those Planters who, for the first time, entered horses for the races in Madras.

RUBBER IN AFRICA

The United States Department of Commerce has recently published a report on 'Rubber Production in Africa' written by H. N. Whitford and Alfred Anthony of the crude rubber section division. This is the fifth of a series of publications on crude rubber issued under authority of the Sixty-seventh Congress, which appropriated funds for the investigation of raw materials wholly or largely under foreign control.

Up to 1912, Africa stood second to South America in the amount of rubber supplied for world consumption. The continent reached its maximum in the year 1906 with shipments amounting to over 20,000 tons. Again in 1910 it produced this amount, but since then there has been a gradual reduction until in 1922 about 2,500 tons were exported. The total African production was contributed by some 25 different political units.

While the main cause for the decrease in the shipments of rubber from Africa has been the drop in prices, there are other contributing factors. There was a considerable decline in the amount of rubber exported even before rubber prices fell to any great extent; in 1913 the total shipments amounted to 16,000 tons, and the 1914 shipments decreased to less than one-half of this, the lowest figure recorded up to that time. This was due mainly to the World War and its effect on Africa, chiefly in the former German colonies, which previously had contributed considerable quantities of rubber to the world's markets. The war influenced the production of rubber in other colonies also. In some of these, notably Madagascar, the collection of rubber was largely fostered by German traders. After 1914 the annual production of rubber in Madagascar fell below 100 tons. Even before 1914 the fluctuation in the annual production of African rubber shows, generally speaking, that the fall in price below a certain limit affected the amounts of rubber shipped.

While in nearly all the political units of Equatorial Africa the rights of the natives are carefully guarded, there are large areas of suitable rubber land than can be obtained for plantation projects where there is no conflict with such rights. In the Belgian Congo, large concessions have been obtained on reasonable terms by special arrangements approved by the Belgian Parliament. In the British West African colonies, concessions are granted with restrictions that protect both the forests and the rights of the natives. The colonial governments generally encourage investments. In Uganda leases for periods not exceeding 99 years are granted by private treaty; the rent per acre varies with the duration of the lease. Requirements for the leasing of land in the French colonies are not uniform. In Liberia land leases can be obtained for long periods and covering large areas with the consent of the Liberian Congress.

The total area of the countries considered herein exceeds 7,000,000 square miles; total population (estimated), 78,000,000.

Nearly all the countries of Africa where *Hevea* might be produced have comparatively large indigenous populations. The problem of mobilizing this labour for steady plantation work has been a difficult one and is perhaps the chief drawback to agricultural development of any sort on a large scale. As a rule, the basic agricultural wage ranges from the equivalent of 10 cents to 30 cents United States currency per day. The days of enforced labour by indenture or by imposing a heavy head tax so that the native will have to work to pay such a tax are past. Persuading the native to work has generally taken the place of compulsion. Where compulsion was practised, the native has not forgotten the white man's efforts to make him work, hence in such regions he is not easily persuaded. His rights in this respect are generally rigidly protected by the Government authorities. If

he works at all, he prefers to work on his own farm. The Governments in some instances have taken advantage of this trait and have encouraged him to plant commercial crops of his own with the others that are needed to supply him with food.

Tropical Agriculture.

(To be continued.)

LETTERS TO THE EDITOR

(The Planters' Chronicle is not responsible for its Correspondents' views.)

U. P. A. S. C. Annual Meet

THE EDITOR, THE 'PLANTERS' CHRONICLE', MADRAS.

SIR,

Mr. Whitton's letter in your issue of December 4, is full of good suggestions, but does not quite solve all our difficulties.

I well know how much Mr. Whitton has at heart the welfare of the Club; but can he expect the Mysore and Coorg Coffee members to be satisfied with a 'Meet' at which only Rugger, Golf and Billiards are to be the attractions, without any competition for the Tennis and Golf Inter District Cups (for which their Associations have subscribed).

I am writing this as a member of the Club and not as Secretary of it, and am of the opinion that two meets in the year would be a mistake. The annual meet must be made a success of, with every attraction possible, otherwise the Club will fizzle out.

If Mr. Whitton had proposed alternate year meets at Ooty in February, and Bangalore (following the Annual General Meeting of U. P. A. S. I.), I would support him; although the Representative of Southern Districts on the Committee has advocated that the Sports Meet be not held at Bangalore oftener than once in three years.

WOODBRIAR ESTATE,
December 9, 1926.

Yours, etc.,
G. W. FULCHER.

The U.P.A.S.C. Annual Meet

THE EDITOR, THE 'PLANTERS' CHRONICLE', MADRAS.

SIR,

I think most Coffee men will welcome the admirable proposals contained in Mr. Whitton's letter, published in your issue of December 4.

If the Sports Committee have any doubts as to whether they could run two meets in one year, the adoption of these proposals would, I feel sure, go a long way towards increasing the Membership, and at the same time, the funds of the Club.

The discussion which arose on the subject as to the venue of the meet in 1927, at the Bangalore Meeting in August, brought out the rather curious fact that the Members have not the power to decide when and where their own Club Meets shall be held!!

It seems to me that if the control vested in the U.P.A.S.I. were removed, Members of District Associations, in their own interests, would join the Club in greater numbers; and at the same time the item should be removed from the Agenda of the Bangalore Meeting, and so put an end to the very desultory and pointless discussions on this subject which annually take place there. In a word, Let the Sports Club manage its own affairs.

Yours, etc.,
S. P. ST. CLARE RAYMOND.

COVERCOOLY, SOMWARPETT,
December 12, 1926.

DISTRICT ASSOCIATION MEETINGS

A. NILGIRI WYNAAD PLANTERS' ASSOCIATION
(INCORPORATED)

Proceedings of an Extraordinary General Meeting held at Gudalur Rest House at 11 a.m. on November 10, 1926.

Present

Messrs. P. A. Naylor, J. S. Nicolls, R. Fowke, E. H. Beadnell, G. W. Fulcher, R. W. Levett, J. C. Blackham, S. F. Scovell, J. T. Moreshead, R. Bentley, M. J. Wright, G. M. Geddes, Dr. W. S. Shaw, and Mr. F. H. Farmer (*Honorary Secretary*).

A telegram was read from Mr. J. Aird, Chairman, regretting his inability to attend; so Mr. P. A. Naylor, Vice-Chairman took the chair in his absence.

Notice of the meeting was read.

The proceedings of the previous meeting having been published in the 'Planters' Chronicle' were taken as read.

U.P.A.S.I. Annual General Meeting Delegates Report.—Mr. Fulcher made a short address to the meeting pointing out that, as delegates were not specifically instructed on the different items of the agenda, he and his co-delegate Mr. Aird had not deemed it necessary to write a report; but any question put forward, he would be pleased to reply to. Mr. Fulcher referred to the matter of the Wynaads Re-survey on which a resolution was put forward at Bangalore and carried.

A few questions on the present position of the Re-survey followed, which were satisfactorily answered.

Delegates Expenses.—Mr. Fowke proposed and Mr. Nicolls seconded that a hearty vote of thanks be accorded to the delegates and that their expenses be passed at the same rates as 1924-25. This was carried unanimously.

Control Committees, Coimbatore.—Mr. Farmer spoke on the current work of Coimbatore Labour Control. Mr. Nicolls for Davershola Group and Mr. Fowke for Mango Range Group offered to have their Groups placed on the list of those prepared to take Propaganda Labour.

With reference to District Labour Rules, Mr. Nicolls proposed that a committee be formed with Mr. Fowke as Chairman to consider rules and that he (Mr. Fowke) be empowered to nominate a Secretary with no voting power. Mr. Nicolls further proposed that Mr. Adkins be asked to nominate a member. Carried. Mr. Fowke proposed that Mr. Nicolls be asked to nominate a third member.

The Honorary Secretary was instructed to write to other District Associations asking them for their District Rules.

Labour Advances.—Correspondence on the question of Labour Advances was read.

The Honorary Secretary was instructed to acquaint the Wynaad Association of the opinion of this Association, and to ask them for their views.

Roads.—The roads of the District were discussed but no complaints or criticisms were raised.

Compounding of Tolls.—Mr. Fulcher explained to the meeting the proposals for the compounding of tolls for lorries and cars. It was decided that the matter be left over until further information could be given by Members of the Nilgiri District Board.

Auditor.—Resolved that Mr. Gopalayer be re-appointed auditor of the Association for the current year on a salary of Rs. 35.

Association Vakil.—The meeting considered the application of Mr. Sankaran Nair for the post of a Vakil to the Association. It was decided that Mr. Aird and Mr. Bentley be asked to draw up conditions of engagements embodying the decisions of the meeting as regards points raised, and submit them to the Managing Committee.

It was suggested that the Managing Committee consist of the Chairman, the Honorary Secretary and Mr. Levett.

Planting Baskets.—Mr. Fowke moved the following resolution which was seconded by Mr. Moreshead :—

Resolved that, in view of the greatly increased rates asked for planting and shading baskets, this Association approach the Wynaad Planters' Association with a view to ascertaining if that Association will co-operate in the fixing of baskets rates for Estates that are members of the Associations concerned and suggest the following scale of rates. The resolution was carried unanimously and a scale of rates on a mileage basis approved.

New Members.—The Chairman proposed that the following gentlemen be made Personal Members of the Association.

Carried.

Messrs. L. W. Russell.

„ J. English.

„ G. W. Knott.

„ P. E. Warne.

„ J. H. Wybrants.

The Chairman proposed that Surrey Estate be made a member of the Association.

Carried.

Correspondence and other Competent business.

The Benevolent Fund.—Mr. J. S. Nicolls called the attention of the meeting to the small number of Subscribers of the Association to the S.I.P.B.F., and asked all present and absent members to give this fund their wholehearted support. A subscription list on being passed round was subscribed to, by all present, and the Honorary Secretary was instructed to write to members not present.

Contract Rates.—Mr. Naylor called the attention of the Association to the lack of co-operation in the District as regards rates for all kinds of contract works.

After considerable discussion Mr. Fowke moved the following resolution which was seconded by Mr. Naylor :—

Resolved that Members of this Association send to the Honorary Secretary a list of general contract rates and that same be circulated to all members of the Association for their guidance.

Carried unanimously.

Nellakotta Station.—Dr. Shaw briefly addressed the meeting on work at the Experimental Station. He very much regretted to have to report that he had found *Heliopeltis* prevalent, though not of a serious nature; so that he did not consider that the District had cause for anxiety.

Correspondence.—Read correspondence regarding conditions on Estates.

Read letter R.C.—2280/26/B2 from the Collector of the Nilgiris *re* Liquor shops.

Read correspondence on Estate wages between Government and U.P.A.S.I.

With a vote of thanks to the Chair the Meeting terminated.

F. H. FARMER,
Honorary Secretary.

P. A. NAYLOR,
Vice-Chairman.

B. MUNDAKAYAM PLANTERS' ASSOCIATION

(INCORPORATED)

Minutes of the 3rd (1926-27) Quarterly General Meeting of the
Association held on November 20, 1926.

Present

Messrs. C. L. Mclean (*Chairman*), S. P. Peckover, H. V. Tringham, J. J. Murphy, H. B. Macpherson, A. J. Mitchell, R. M. Saywell, F. Hawkings, J. S. P. Symons, S. N. Ure, and G. A. Rutherford (*Honorary Secretary*).

Notice.—The Honorary Secretary read the notice calling the meeting.

I. CONFIRMATION OF MINUTES OF COMMITTEE OF MANAGEMENT MEETING HELD ON OCTOBER 20, 1926.

The Honorary Secretary read the minutes of the Committee of Management Meeting.

Mr. H. B. Macpherson brought up the matter of a Cattle Pound on Eldorado Group, and it was decided that the Honorary Secretary write the Tahsildar, Meenachil, regarding the establishing of a Cattle Pound on that Estate.

Proposed by Mr. H. B. Macpherson and seconded by Mr. H. V. Tringham that the minutes be confirmed. *Carried.*

II. SUBSCRIPTIONS.—

(a) *U.P.A.S.I. Sports Club.*—The Honorary Secretary informed the meeting that to date only Rs. 30 had been subscribed for this, and was instructed to send reminders to those members who had not already paid.

(b) *S.I.P. Benevolent Fund.*—The Honorary Secretary informed the meeting that to date Rs. 225 had been subscribed against Rs. 415 last year, and was instructed to send reminders to those members who had not already paid.

(c) *Peermade Churchyard Fund.*—The Honorary Secretary informed the meeting that to date Rs. 135 had been subscribed against Rs. 177 last year, and was instructed to send reminders to those members who had not already subscribed.

STEAMER FREIGHT ON RUBBER

The Honorary Secretary read letter from Secretary, Southern India Committee of the R.G.A. regarding the discrepancy between the freights on the various products of South India, Rubber being 77s. 6d. per ton of 50 c. ft. and Tea being only 52s. 6d. per ton of 50 c. ft. It was decided to give every support in the attempt to have the freight on Rubber reduced.

CORRESPONDENCE AND ANY OTHER BUSINESS

1. *Thirty-third Annual General Meeting of U.P.A.S.I. at Bangalore Delegates' Report.*—Messrs. C. L. McLean and S. N. Ure reported on the Annual General Meeting and it was proposed by Mr. F. Hawkings, and seconded by Mr. R. M. Saywell that a vote of thanks be accorded the delegates for representing this Association.

Proposed by Mr. Murphy 'That the Honorary Secretary be instructed to write the Secretary U.P.A.S.I. asking him to convey this Association's thanks to Dr. Carpenter for his very useful advice given to Tea Planters at the Annual General Meeting.' *Carried unanimously.*

2. *Sri Mulam Popular Assembly 1926.*—It was resolved that the following subjects be brought up:—

(1) Registration and lighting of bandies.

(2) Vellanadi-Cheruvally Road.

3. *West Coast Planters' Association Resolution.*—The Honorary Secretary was instructed to circulate this, and bring it up at the next Quarterly General Meeting.

With a vote of thanks to the Chair, the Meeting then terminated.

G. A. RUTHERFORD, *Honorary Secretary.* C. L. McLEAN, *Chairman.*

BANGALORE—CENTRAL HOTEL, 'The Best in the Station.'

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea					
Mark	Pkgs.	Price	District	Week ending Nov. 20, 1926	January 1 to Nov. 20, 1926	January 1 to Nov. 20, 1925		
				s. d.	s. d.	s. d.	s. d.	s. d.
(A) TEA (WEEKS ENDING NOVEMBER 20, 1926)			N. India.	1 5.43	1 7.72	1 5.36		
			S. India	a1 5.19	b1 7.23	c1 5.41		
			Ceylon...	1 7.95	1 8.32	1 7.90		
			Java ...	1 1.96	1 4.12	1 0.73		
			Sumatra.	Nil.	1 4.54	1 4.33		
			Nyassa-land.	Nil.	1 5.42	1 0.96		
(a) Anamalais—			Total ...	d1 5.93	e1 7.55	f1 5.79		
Thay Mudi ...	141	1 8½						
(b) Central Travancore								
Granby ...	106	1 6½						
Stagbrook ...	132	1 6						
Pirmed ...	103	1 5¾						
Glenmary ...	99	1 5¾						
Cheenthalaar ...	132	1 5½						
Kolie Kanum ...	111	1 5½						
Fairfield ...	94	1 5						
Twyford and Ashley.	136	1 4¾						
Haileyburia ...	158	1 4¼						
Bon Ami ...	100	1 4¼						
Karim Kolam ...	121	1 4						
Karimtharuvi ...	165	1 3¾						
(c) Coorg—								
Glen Lorna ...	244	1 3¾						
(d) Nilgiris—								
Prospect ...	169	1 9¼						
Woodlands ...	108	1 6¼						
Parkside ...	32	1 6						
Craigmore ...	138	1 5¾						
Mailoor ...	50	1 5						
(e) Nilgiri-Wynaad—								
Seaforth ...	93	1 4½						
(f) South Travancore—								
Poonmudi ...	14	1 2½						
Invercauld ...	62	1 1¼						

N.B. — The number of packages on which the South Indian averages are based is given in the foot-note at the end of the page.

(B) COFFEE

SPECIAL CABLE, LONDON, DECEMBER 15, 1926
'A' QUALITY 162s. MARKET QUIET.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Thursday, December 14, 1926, was 18½d.

a 12,585 b 161,195 c 168,131 d 76,717 e 3,069,855 f 2,861,129

(b) *Precis of Reports on the London Market received on Monday, December 13, and covering the seven days ending Tuesday, November 23 :—*

1. *Tea.*—Though the South Indian average for the week ending Saturday, November 20, was $\cdot 83d.$ lower than that which was realized during the preceding seven days; yet undue significance did not attach to the falling off in price, because the sales during the week ended November 13, were exceptionally small. The market for the seven days under review was firmer than could have been anticipated three weeks before, and the change for the better was probably due to the decision of the North Indian tea planters to stop plucking on 20th of last month. This step was probably the only thing which could have obviated a slump in the commodity, seeing that the North Indian crop to the end of October last was over 25 million pounds in excess of the crops for the corresponding periods of either 1925 or 1924.

2. *Rubber.*—During the seven days under review, stocks increased by 1,254 tons to 44,553 tons; and the 'spot' quotation on the 23rd was $19d.$ On October 31, the Singapore and Penang Dealers' stocks were respectively 22,603 and 4,011 tons.

3. *Coffee.*—At the auctions the demand for the best qualities was keen but no East Indians were on sale. For the latter the price—based on private transactions—is quoted at 160s. to 180s. per cent.

II. Weekly Rainfall Statement

From Sunday, December 5, 1926 to Saturday, December 11, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	0.17	73.91	74.08	20. Naduvattam	...	94.22	94.22
2. Kalthuritty.	0.42	114.35	114.77	21. Coonoor ...	3.19	30.82	34.01
3. Kallar Bridge.	1.26	130.77	132.03	22. Kotagiri ...	3.63	47.19	50.82
4. Tenmalai ...	N.R.	111.43	N.R.	23. Ootacamund	0.76	42.71	43.47
5. Mundakayam.	...	150.44	150.44	24. Yercaud ...	1.27	44.79	46.06
6. Peermade ...	0.27	178.21	178.48	25. Devala ...	N.R.	145.77	N.R.
7. Twyford ...	0.11	197.89	198.00	26. Gudalur ...	...	78.83	78.83
8. V'periyar ...	0.06	79.92	79.98	27. CALICUT ...	N.R.	123.31	N.R.
9. Kalaar ...	0.12	195.48	195.60	28. Kuttiyadi ...	N.R.	163.40	N.R.
10. Chittuvurrai	0.22	40.16	40.38	29. Vayittiri ...	0.24	185.19	185.43
11. BODI'KANUR	...	23.14	23.14	30. Manantoddi.	...	105.20	105.20
12. COCHIN	...	120.82	120.82	31. Billigiris ...	1.11	49.96	51.07
13. Mooply Valley,	...	129.57	129.57	32. Sidapur ...	...	74.44	74.44
14. Pachaimalai.	0.11	123.10	123.21	33. Pollibetta ...	...	97.29	97.29
15. Mudis ...	...	231.40	231.40	34. Somwarpett.	...	70.56	70.56
16. Nell'pathy...	0.03	99.36	99.39	35. Ballupete ...	...	65.47	65.47
17. POLLACHIE	0.50	31.32	31.82	36. MANGALORE	...	114.70	114.70
18. Manjeri ...	...	136.25	136.25	37. MADRAS ...	0.51	29.22	29.73
19. Nilambur ...	0.04	118.74	118.78				

W=During the week.

P=Previously. N. R.=No return received.
(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, December 16, 1926)

(A) EXCHANGE

Since our last report, there has been no change at all, either in the buying or selling rates quoted by local Banks ; and business has again been very small in volume. Rates for Near deliveries are still uncertain ; but for Forward are very steady, and if there is going to be any squeeze at all for money, we think it is more likely to be in April/May than even March. The market is devoid of news, and there is nothing to relieve the dullness. Closing rates quoted are as follows :—Selling T.T. on London 1s. 5 3/4d. December, 1s. 5 25/32d. first half and 1s. 5 13/16d. second half January, 1s. 5 27/32d. February/April and 1s. 5 13/16d. May/September. There are buyers of three months Approved Credits at 1s. 6 1/16d. December, 1s. 6 3/32d. first half and 1s. 6 1/8d. second half January, 1s. 6 5/32d. February/April and 1s. 6 1/8d. May/September.

(B) MONEY

The demand for Burma has slackened off, and it may be that there is not much more finance required there, and there is some Local demand. Rates for money are unchanged at 2 per cent for Call, 2½ per cent for three months, 3 per cent for six months and 4 per cent for twelve months ; but there is no business passing at these rates. The Imperial Bank of India rate is unchanged at 4 per cent, and the percentage of cash to liabilities is 38·33 as compared with 40·04 last week. Government Securities are all quoted up on the week and Imperial Bank of India fully paid shares have risen to about Rs. 1,530.

IV. Selected Madras Market Quotations

For the week ending Wednesday, December 15, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10 $\frac{3}{4}$	11
Bank of Mysore Rs. 100	165	170
Indian Banks (Rs. 100) Rs. 50	67	70
Indian Banks (Rs. 100) Rs. 10	13-6-0	14
Central Bank (Rs. 50) Rs. 25	30	31
Imperial Bank of India (Rs. 500)	1520	1530
" " (Rs. 125)	390	395
Chartered Bank £5	£ 19-5-0	£ 20-0-0
Eastern Bank (£10) £5	£ 6	£ 6-5-0
Mercantile Bank (£25-A) £12 $\frac{1}{2}$	£ 28-15-0	£ 29-15-0
" " (£25-B) £12 $\frac{1}{2}$	£ 28-15-0	£ 29-15-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12 $\frac{1}{2}$	£ 46-10-0	£ 47-15-0
P. and O. Bank £10	£ 10-10-0	£ 11
MILLS		
Bangalore W. C. and S. Ordy. (Rs. 100)	...	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	94	98
Buckingham and Carnatic Ordy. Rs. 100	...	190
Buckingham and Carnatic 7 $\frac{1}{2}$ per cent. Prefs. Rs. 100	125	...
Coimbatore Rs. 100	157	...
Coimbatore Malls Rs. 85	75	80
Gokaks Rs. 100	110	...
Maduras Rs. 100	415	...
INDUSTRIALS		
Deccan Sugar Ordy. Rs. 100	182	200
Deccan Sugar 7 per cent. Cum. Prefs. Rs. 100	110	...
E. I. Distilleries and Sugar Factories Ordy. £0-16-0	15s.	17s.
E.I D. 7 per cent. Cum. Prefs. £1 (Madras Register.)	13-2-0	13 $\frac{1}{2}$
Indian Aluminiums Rs. 100	57 $\frac{1}{2}$	62 $\frac{1}{2}$
Malabar Match (Rs. 10) Rs. 7	1	1 $\frac{1}{2}$
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9	9 $\frac{1}{2}$
W. E. Smith Ordy. Rs. 100	47	51
W. E. Smith 6 per cent. Prefs. Rs. 100	85	86
Spencers Ordy. Rs. 100	142 $\frac{1}{2}$	150
Spencers 6 per cent. Prefs. Rs. 100	98	101
Spencers 7 $\frac{1}{2}$ per cent. 2nd Prefs. Rs. 100	120	122 $\frac{1}{2}$
Tata Iron and Steel Ordy. Rs. 75	65	69
" " 7 $\frac{1}{2}$ per cent. 2nd Prefs. (Rs. 100)	81	83
United Breweries Ordy. Rs. 75	137 $\frac{1}{2}$	...
United Breweries 6 per cent. Prefs. Rs. 100	92 $\frac{1}{2}$	97 $\frac{1}{2}$
PLANTING		
Cochins Rs. 15	45	48
Eddivannas Rs. 15	29 $\frac{1}{2}$	31
Kalajas (Rs. 15) Rs. 9	8 $\frac{1}{2}$	9
Kinalurs Rs. 10	32 $\frac{1}{2}$	34
Kuttiadis Rs. 15	19 $\frac{1}{4}$	21 $\frac{1}{4}$
Malankaras Rs. 30	100 x.D.	105 x.D.
Peermades Ordy. Rs. 10	26	28
Peria Karamalais Rs. 15	46 c.R.	47 c.R.
Periasholas Rs. 10	6	7
Periyars Rs. 10	21 $\frac{1}{2}$	22 $\frac{1}{2}$
Pudukads Rs. 15	52 $\frac{1}{2}$ c.D.	60 c.D.
Rockwoods Rs. 10	4 $\frac{1}{2}$	6
Thodapuzhas Rs. 10	31	33
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22 $\frac{1}{2}$	18 $\frac{1}{2}$	20
United Nilgiris Rs. 100	115 c.D.	117 $\frac{1}{2}$ c.D.
Vellamalais (Rs. 15)	14	15

The Planters' Chronicle

Recognized as the Official Organ of the U. P. A. S. I. (Incorporated)

Managing Editor's Postal Address : POST BOX 155, MADRAS

Do. do. Registered Telegraphic Address : UPASI, Madras

Managing Editor, C. B. COCKAINE.

VOL. XXI, No. 52] SAT., DECEMBER 25, 1926 [PRICE, AS. 8

CONTENTS

	PAGE		PAGE
Editorial Notes ...	873	Rubber in Africa ...	879
Personalia ...	875	Commercial and Meteorological.	881
Tea and Coffee in Nyasaland ...	876		

EDITORIAL NOTES

This issue will reach the majority of our readers, if not on Christmas day, at any rate long before that super-kruschen feeling which Christmas can induce more potently than any drug has worn off. Its pages therefore may perhaps not unfittingly open in more human or at least less professional vein than a business paper can customarily adopt. It is destined for circles where Business is paying its annual tribute to Festivity, and where any intruder which made no effort to adapt itself even in some small measure to the prevailing atmosphere would be decidedly malapropos. We therefore preface our usual Leaderettes with a few lines which we trust will win for this week's Chronicle the entree which it has in duty bound to seek. They will we believe be none the less acceptable for being short, since the essential of an introductory credential is sincerity, not length; and we content ourselves with saying that the Secretary of the U.P.A.S.I. has asked us to convey his seasonal greetings to all his very many friends throughout the Planting Districts of Southern India; and with adding that we trust we ourselves may not be considered unduly presumptuous if we venture also to wish all who read these lines

A Thoroughly Jolly Christmastide

About this time last year, some of our Readers informed us that they had sent contributions to St. Dunstan's as a result of an article which was prompted by the receipt of the Tenth Annual Report of the Organization and which appeared in our issue of November 28. This Mail has brought to hand the Eleventh Annual Report of the Chairman, Capt. Ian Fraser, C.B.E., M.P. Our Readers will be glad to know that the report is able to record with quiet optimism that during the twelve months under review there has been unbroken continuity in, and even considerable extension of, the wonderful work for warblinded men which was instituted by the late Sir Arthur Pearson on March 27, 1915. It is satisfactory to note that, during the twelve months ended March 31, 1926, Income exceeded Expenditure by over £14,000; but the need for continued financial support still continues,

and some concern is expressed at the increased difficulty in marketing the blinded soldiers' output on account of the industrial depression which prevails at Home. In our article last year, we pointed out that the Graduates of St. Dunstan's include the Winner of the first Rhodes scholarship at Oxford, Hotel Proprietors, Chartered Accountants, Correspondence Managers, Stenographers, and Mail order experts ; and, we have in mind, as we write these lines, a topical example of the wonderful way in which St. Dunstan's is continually proving that those who have lost their sight are not by any means necessarily condemned to self-helplessness and dependence on charity for the remainder of their years. The example in question is the case of Mr. W. G. Speight who lost his sight at Ypres in August, 1915 ; and who, after passing through St. Dunstan's, assumed in 1919 the Principalship of the Palamcottah Schools for the Blind. This Gentleman, who in the interests of his work for the blind in India has already travelled unattended three times between England and India and once to Australia and back, is a member of the Committee for Plans and Estimates of the proposed Institution for the Blind in Madras in connection with which His Excellency the Governor has recently launched an appeal. Capt. Fraser assures us that St. Dunstan's on the principle of ' Many a mickle makes a muckle ' welcomes, equally with big contributions, the Juniors' mites ; and those, who desire to participate in the work which he so ably supervises, should send their contribution direct to the Treasurer, St. Dunstan's Headquarters, Inner Circle, Regent's Park, London, N.W. 1.

Mr. J. A. Davis, M.L.C., in the course of a recent speech at Ootacamund to a gathering which had assembled to do him honour
A Tea Venture on his election to the Madras Legislative Council, made the following remarks :—

In co-operation with an experienced Nilgiri Planter and in consultation with Mr. Ari Gowder, we are working up a huge scheme for planting up a large proportion of Badaga lands and lands owned by Anglo-Indians with the very best tea. One of the largest firms in the world had offered most liberal terms in this connection ; and if with the co-operation of the Industries Department, this scheme came off, every Badaga and Anglo-Indian whose land was thus planted up would be a made man, especially as the company in question was prepared to provide the finest class of tea plants, expert advice, and factories free of charge, undertaking to purchase from each planter the leaf from his tea at ruling market rates for a long terms of years. Thus not only would these petty land owners have occupation brought to their door, but they would also have their produce purchased at their door.

Reuter states that a Colonial Office announcement shows that the total
Rubber Stocks in the East stocks in Ceylon and Malaya on October 31 were 41,980 tons : the holdings in Ceylon, with Malayan dealers, and on Malayan Estates being respectively 7,000, 6,315 and 28,665 tons. The Malayan stocks were 10,141 tons in excess of the amount for which unused export coupons were outstanding ; but on the other hand, the Ceylon holdings were 8,000 tons less ; so that, according to these figures, there were 2,141 tons of rubber in Ceylon and Malaya on October 31 uncovered by unused export coupons which had been issued prior to that date. The Strait Settlements, the Federated Malay States, Johore and Keddah held respectively 3,129 ; 19,555 ; 4,203 ; and 1,778 tons of the total Malayan Stocks of 28,665 tons.

PERSONALIA

BIRTH

CAMPBELL.—At The Lady Willingdon Nursing Home, Madras, on Friday, December 17, 1926, to Mr. and Mrs. Gordon Campbell of Kalaar Estate, Munnar, a daughter.

DEPARTURE

MR. R. P. STOTT of Surianalle Estate, Kanan Devans, has left the service of The Malayalam Plantations, and proceeded to The Straits.

TRANSFERS

MR. I. W. FINLAYSON has left Kardoora Estate, Meppadi, and gone to Wentworth Estate, Cherambadi P.O., Nilgiri Wynaad.

MR. R. W. M. HAY has been transferred to Kardoora Estate, Meppadi from Thavenjel Estate, in the Wynaad.

MR. A. W. LESLIE has left Mundakayam Estate for Nedumpara Estate, South Travancore.

MESSRS. G. MACHARDY of Surianalle Estate, Kanan Devans, and C. H. MORRIS of Koney Estate, South Travancore, have effected an interchange.

OTHER PLANTING NEWS

MR. and MRS. H. L. PINCHES of Munnar are spending Christmastide in Madras.

We were very pleased to receive visits this week at our office from MR. G. Q. ARCHARD of Sentinel Rock Estate, Wynaad; and MR. E. VINCENT of Messrs. E. Vincent & Co., Ltd., Coimbatore.

The following appears in the S.P.M.R. Orders for the current week:—

Promotion.—Lieutenant to be Major: CECIL RALPH TOWNSHEND CONGREVE. Dated September 1, 1926.

Command.—MAJOR C. R. T. CONGREVE assumed Command of the Corps with effect from November 11, 1926, vice Captain E. G. Pullan, M.C.

We notice that no less than seven Planters figure amongst the owners who have entered horses for the present Races in Madras. MR. J. J. MURPHY entered 10 horses, MR. G. A. MARSH 4, MR. J. S. NICOLLS 2, MESSRS. J. O. F. MAURICE AND W. R. WRIGHT 1, and MR. E. C. KENT AND THE EARL OF SHANNON 1 each; but, of these 19, one—Mr. Murphy's Louvisca—died before the Meet commenced. A list of the entrants is given below:—

MR. J. J. MURPHY.	' Brave Colleen.'	MR. G. A. MARSH.	' Carremar.'
	' Brave Queen.'		' Mademoiselle Vite.'
	' Burnham Beeches.'		' St. Rita.'
	' Dargos.'		' The Gaffer.'
	' Last Word.'		' Nicaragua.'
	' Platinum.'	MR. J. S. NICOLLS.	' Primer.'
	' Raven's Ait.'		' Applicate.'
	' San Tagg.'	MR. E. C. KENT.	' The Toddler.'
	' Stainer.'	THE EARL OF	' Bacchante.'
	' Louvisca.'*	SHANNON.	
		MESSRS. J. O. F.	
		MAURICE AND W. R.	
		WRIGHT	

* Died after entry.

TEA AND COFFEE IN NYASALAND

BY

R. S. HYNDE, PROPRIETOR OF THE NYASALAND TIMES

In 1878 a country gardener, the late Jonathan Duncan, went out to Nyasaland, the country discovered by Livingstone, to join the Church of Scotland Mission, then recently founded at Blantyre. He had been given by Prof. Balfour, curator of the Edinburgh Royal Botanical Gardens, three coffee seedlings and a young tea plant. Mr. Duncan carefully tended them on the long voyage out and all the way up the Zambesi and Shire Rivers, but in spite of every care two of the coffee plants and the tea plant succumbed. The remaining solitary coffee seedling grew, and in time bore its crop of berries, everyone of which was carefully planted.

As more and more seed became available, plantations were started in different parts of the country, and as the price of coffee in London was sufficiently high to cover the heavy costs of transport, the industry attracted capital for its development. Coffee growing continued to flourish for many years, and coffee exports went up to 1,000,000 pounds and led to the demand for a railway.

About 1900, owing partly to exhaustion of the unmanured soil, the carriage of artificial manures being prohibitive, and partly to a considerable fall in prices of coffee, the industry began to decline. Now it is small indeed, the export during 1925 having fallen to 20,365 pounds. The place of coffee has largely been taken by tobacco and cotton in the districts with a comparatively dry climate, but where there is a higher rainfall tea has been substituted.

Although the first tea plant died on the way to Nyasaland, a few others were planted in the experimental gardens of the mission at Blantyre. The average rainfall there, however, is too low for successful tea cultivation, and nothing was done with the seed produced, until one of the pioneers, J. W. Moir, deputed the late Henry Brown, an ex-Ceylon coffee planter, to open a coffee estate in the Mlanje district about 1890. Mr. Moir believed in experimenting with other products, and procured additional tea seed from Natal, which he planted in small plots near his bungalow. The Mlanje Mountain foothills, where his estate was situated, being hotter and more humid than the surrounding districts, with an average annual rainfall of 60 inches, were more suited to the tea plants, and they thrived exceedingly.

Henry Brown, a few years later, opened up a coffee estate for himself in the same district, and also started planting tea at Thornwood Estate, but in both cases it was more or less experimental and coffee was the main crop. In 1901, on the retirement of Mr. Moir, his property, known as the Lauderdale Estate, passed into the hands of a company called Blantyre and East Africa, Ltd. of which Mr. Moir is still one of the directors. The then manager of the company was faced with the evident decline of coffee and the necessity of replacing it by some other cultivation, and he decided to

push ahead with the planting of tea as seed became available from the established bushes and to let the coffee gradually die out.

The only seed available was of mixed kinds, and it was later recognized that a much better quality could be got by planting some of the pure-bred, such as Manipuri or Assam. Attempts were made to bring seed from Ceylon, but out of large importations not a single one was successful, owing to the slowness of the transport and the uncertain connections at that time. Nowadays, seed is imported yearly, chiefly from India.

TEA REPLACES COFFEE

Having decided upon a definite policy of growing tea at the Lauderdale Estate, the company extended its acreage, imported tea machinery, and placed the product on the London market. Other coffee planters in the district, seeing the success of these experiments, also took up tea planting, and now practically all the available land in the Mlanje area with an annual rainfall of at least 60 inches has been taken up for tea cultivation.

Among the more prominent firms that have taken up tea growing are George Garden, one of the oldest planters in the district; the Ruw Estates, Ltd.; the African Lakes Corp. on its Chitakali Estate; Mini-mini Estate, Ltd.; James Miller; J. W. McClure. Mrs. Brown and Miss Brown, widow and daughter of the Henry Brown mentioned herein, are carrying on the Thornwood Tea Estates opened up by him.

The average price of freehold land suitable for tea growing is at present about £4 an acre.

Only last year the famous catering firm of Lyons, Ltd., of London, acquired some 8,000 acres in the Mlanje district and has started operations under Mr. Shaw, an ex-Ceylon tea planter.

From Mlanje the cultivation spread to Cholo, a neighbouring district, where the rainfall, although not so high as in Mlanje, is believed to be sufficient. The average elevation of the Mlanje estates is 2,000 feet, but Cholo is 3,000 and consequently the quality of the tea produced there, is slightly better. The first estate in Cholo to plant tea was Bandanga, then belonging to Blantyre and East Africa, Ltd., but not a separate company.

India seed is being imported by most of the planters now, rigorous seed selection is being carried out in the country, and the yield and quality of the product are being gradually improved. Up-to-date machinery has been imported, and factories erected on India and Ceylon models, with the result that to-day the export exceeds 1,000,000 pounds and is rapidly growing. The methods of cultivation are modelled on those of India and Ceylon.

Practically all the tea imported into Great Britain is sold by auction in Mincing Lane, and the tea of Nyasaland is no exception. Its average prices compare very favorably with many estates of similar elevation in Ceylon or India.

The tea shipped from Nyasaland practically all goes to the United Kingdom, with the exception of a few tons taken by British South Africa and Rhodesia. South Africa is both a coffee and a tea drinking country; generally speaking, the Dutch section of the population favors coffee, and the British section tea, but the consumption of tea appears to be gaining on coffee.

OUTLOOK FOR TEA GROWING

As regards the future of tea growing in Nyasaland, the possible limits of cultivation will soon be reached in the Mlanje and Cholo districts. The climate, especially rainfall, is the limiting factor. There are, however, areas on the west shores of Lake Nyasa with a relatively high rainfall which could be developed in tea whenever communications are sufficiently developed to make the export commercially sound. At the north end of the lake is a high plateau in the Lavingstone Mountains in Tanganyika (mandated) Territory, also suitable for tea growing, as it has a very high rainfall and excellent soil. Here again development depends on transport facilities. When the projected railways are made under the £ 10,000,000 loan scheme, there is no doubt that this area will largely be taken up for tea and coffee production.

There are also smaller areas in Portuguese territory to the east of Nyasaland, more especially the Lomwe hills, which are climatically suitable for tea growing, but, owing to the unstable political state of that country, it will probably be many years before an attempt is made to establish plantations there. As civilization advances in Africa, the indigenous native population will also be consumers, and it is therefore unlikely that there will ever be overproduction.

NYASALAND TEA PRODUCTION

					<i>Acres</i>	<i>Production Pounds</i>
1904	...	...	...	...	260	1,613
1905	...	...	...	...	395	120
1906	...	...	...	...	445	...
1907	...	...	...	...	516	...
1908	...	...	...	...	598	23,948
1909	...	...	...	...	518	36,281
1910	...	...	...	...	1,190	42,042
1911	...	...	...	...	2,593	43,876
1912	...	...	...	...	2,812	67,726
1913	...	...	...	...	2,870	116,074
1914	...	...	...	...	3,338	166,248
1915	...	...	...	...	4,141	288,341
1916	...	...	...	...	4,228	420,685
1917	...	...	...	...	4,523	155,338
1918	...	...	...	...	4,433	700,455
1919	...	...	...	...	4,840	801,890
1920	...	...	...	...	4,285	496,836
1921	...	...	...	...	4,354	208,255
1922	...	...	...	...	4,701	737,165
1923	...	...	...	...	4,235	963,309
1924	...	...	...	...	5,093	1,058,504
1925	...	...	...	...	5,435	1,115,781

RUBBER IN AFRICA

(Concluded from page 865, issue of December 18, 1926)

Up to about 1910 practically all of the rubber that was gathered in Africa came from wild plants. Since 1912 a very small proportion of the rubber has come from planted trees. Especially in 1923 and 1924 the quantities of rubber from plantations considerably increased although the exact amount cannot be determined because cultivated rubber is not always separated from wild, in the statistics.

The plants that have contributed most to the African shipments of rubber belong to the family Apocynaceæ (dogbane). The principal tree in this family that is a source of rubber is *Funtumia elastica*, which is confined to that portion of the equatorial belt stretching from the Gulf of Guinea to about the longitude of Lake Victoria in the Uganda Protectorate. This tree grows in both the tropical and the partly tropical evergreen hardwood forest; in some districts it seems to be more abundant in the latter than in the former.

As far as can be determined, however, larger quantities of rubber have been gathered from various vines and so-called shrubs that belong mainly to the genus *Landolphia* and other closely related genera, such as *Clitandra* and *Carpodinus*. The species of these genera have a much wider distribution than *Funtumia elastica*; in fact, they are found in all the vegetative types described above. The genus *Mascarenhasia* is represented by several species of trees from which small quantities of rubber have been gathered. This genus is confined to West African colonies and to Madagascar.

Numerous other species of plants have contributed small quantities of rubber to the markets. Among these may be mentioned *Ficus* (*Moraceæ* or fig family), *Euphorbia* (*Euphorbiaceæ* or Para rubber family), and *Cryptostegia* (*Asclepidaceæ* or milkweed family).

Practically all the wild plants from which rubber is gathered in Africa are of such a nature that the cheapest method of collecting the latex is to destroy the plants. This applies to trees as well as to vines. Most of the rubber offered is in a very crude form, inasmuch as it has been poorly prepared. It generally contains a considerable quantity of moisture and foreign substances and sometimes has deteriorated badly before it reaches the market. In many instances, too, it is mixed with the latex of inferior species, which further lowers its market value.

The governments of the various political units of Africa have appreciated the fact that the destructive collection methods in use, would eventually deplete the forests of rubber-producing plants. Practically all of them sooner or later passed laws prohibiting the collection of latex by the destruction of the plants. In most instances, however, much of the rubber was gathered in outlying districts over large areas, and it was impossible to enforce these regulations. In the few cases where the natives were subject to control there was a noticeable decrease in the amount of rubber produced. This was due primarily to the fact that gathering latex by tapping the standing plants instead of cutting them down before extracting the latex proved to be very expensive and consequently did not pay.

As stated above, the first marked decrease in the production of rubber in Africa occurred in 1914. In 1916 and 1917 production increased slightly, reaching 10,000 tons. From that time on, there has been a gradual decrease. Although the price in 1919 was sufficiently high to induce the collection of more rubber than is indicated by the production of this year, failure to do so was probably due to the fact that there had not been sufficient time to recognize the war-disrupted collecting agencies before the price of rubber dropped to an unremunerative figure.

It is quite probable that should the price of rubber remain at a fairly high level for a considerable number of years there will be a re-organization of the collection industries in various parts of Africa, but it is doubtful if production of wild rubber in that continent will ever again reach the figures

it has in the past although the provision of better transportation facilities in various districts may open up regions in which rubber gatherers have not worked heretofore. Many of the old regions have been well-nigh depleted of their rubber-producing plants by destructive collection methods. In some instances, however, where a number of years have elapsed since they were previously worked over, new plants may have had time to replace, in part at least, the old ones that were destroyed. However, these regions may not produce as much rubber as they formerly did.

Certain of the colonies that heretofore have depended on rubber production have encouraged the planting of crops of various kinds under the control of both Europeans and natives, which require a great deal of the labour force that was formerly used in collecting rubber. In such regions it is doubtful whether there will be much labour available for rubber collection.

In the first decade of the present century colonial officials and commercial companies in nearly all sections of tropical Africa encouraged the planting of rubber, the former by establishing experimental plantings and in some instances by urging the natives to plant. Practically all the wild species that were producing commercial quantities of rubber were tried—*Manihot* (*cara* or manicobo), *Castilla* (*caucho* or *castilloa*), *Funtumia elastica* (lagos silk rubber tree), *Landolphia* (vine rubber), *Ficus elastica* (rambong), *Hevea brasiliensis* (para), and others of less importance. In Africa, as elsewhere, efforts to make a commercial success of all these species have been practically abandoned in favour of Para rubber.

German East Africa (now Tanganyika Territory) stood first in acreage devoted to rubber. In 1912 over 113,000 acres had been planted, all but 1,000 acres of which was *Ceara* rubber. While more than 1,000 tons, mainly *Ceara* were exported in both 1912 and 1913, it is stated that in 1914 the German planters had begun to replace marginal areas devoted to *Ceara* with other crops, since the cost of tapping such areas was so high that profitable returns could not be obtained. At the outbreak of the war these plantations were entirely abandoned.

Such statistics as are available concerning the acreage planted to *Hevea* in Africa are generally misleading for various reasons. In the first place, this rubber has largely been planted with other crops, principally coffee and cacao, and to some extent with other rubber species such as *Funtumia* and *Castilloa*. In some instances only the number of trees is recorded, in others the acreage, and sometimes these two methods of recording seems to overlap. Moreover, in some cases statistics of acreage or number of trees planted can be obtained only for years previous to 1915, and, since disturbances due to the war caused entire abandonment of some planted areas, it remains to be determined the acreage that might be salvaged and brought into bearing.

However, from the data at hand it is roughly estimated that there is the equivalent of upward 38,000 acres of planted *Hevea* in Africa to-day, distributed as follows:—

				acres.
Uganda	...	...	...	16,000
Belgian Congo	...	...	...	5,000
Nigeria	...	...	...	8,000
Gold Coast	...	...	...	800
Cameroons (British)	...	...	...	7,000
Liberia	...	...	...	1,400
			Total	38,200

This rubber can be classed as mature, inasmuch as, except for small acreages in Uganda, practically no planting has been done since 1914. It is impossible to state how much plantation rubber has been produced, since statistics do not always separate the plantation product from the wild.

COMMERCIAL AND METEOROLOGICAL

I. Summary of latest Market Reports and Prices to hand :—

(a) Some of the higher London Prices—

Best prices realized on the London Market			Average prices obtained for tea			
Mark	Pkgs.	Price	District	Week ending Nov. 27, 1926	January 1 to Nov. 27, 1926	January 1 to Nov. 27, 1925
(A) TEA (WEEK ENDING NOVEMBER 27, 1926)				s. d.	s. d.	s. d.
(a) Anamalais—		s. d.	N. India.	1 5·03	1 7·65	1 5·44
Selaliparai ...	145	1 5½	S. India	a1 4·60	b1 7·18	c1 5·45
Naduar ...	206	1 5¼	Ceylon...	1 8·23	1 8·32	1 7·96
Periakaramalai ...	188	1 5¼	Java ...	1 1·52	1 4·07	1 0·74
Sholayar ...	238	1 5	Sumatra.	1 0·97	1 4·26	1 4·33
Ani Erangel ...	172	1 4¼	Nyassa-land.	Nil.	1 5·42	1 1·04
Karakundru ...	264	1 3¼	Total ...	d1 5·62	e1 7·51	f1 5·88
(b) Central Travancore			<p>N.B.— The number of packages on which the South Indian averages are based is given in the foot-note at the end of the page.</p>			
Twyford ...	140	1 5				
Dymock ...	115	1 5				
Pirmed ...	116	1 5				
Glenmary ...	115	1 4¾				
Haileyburia ...	100	1 4¾				
Pambanar ...	77	1 4¾				
Thengakhal ...	83	1 4½				
Nellikai ...	90	1 4				
Mlamallay ...	68	1 3½				
Ladrum ...	95	1 3				
Arniekal ...	82	1 2¾				
Maimallay ...	96	1 2¼				
(c) Kanan Devans—						
Chokanad ...	95	1 7½				
Letchmi ...	121	1 7¼				
Sevenmallay ...	80	1 6¾				
Periavurrai ...	149	1 6				
Pullivassal ...	180	1 5¾				
Chattamanaar ...	167	1 2½				
Talliar ...	115	1 2½				
(d) Mundakayam—						
Yendayar ...	97	1 2¼				
(e) Nilgiris—						
Nonsuch ...	102	2 1¼				
Brooklands ...	90	1 9				
Glendale ...	80	1 7¼				
Bhawani ...	96	1 7				
Craigmore ...	154	1 6¾				
Woodlands ...	76	1 6¾				
(f) Nilgiri-Wynaad—						
Seaforth ...	151	1 4¾				
Barwood ...	111	1 1¼				
(g) South Travancore—						
Braemore ...	16	1 4¼				
Merchiston ...	38	1 1¾				
Poonmudi ...	71	1 2¾				
(h) Wynaad—						
Erramaculla ...	60	1 2¾				
Chulika ...	92	1 2				
Elstone ...	80	1 1¾				

(B) COFFEE

SPECIAL CABLE, LONDON, DECEMBER 22, 1926

'A' QUALITY 162s. MARKET QUIET.

(C) RUBBER

The London 'Spot' quotation for Plantation first Latex Crepe on Tuesday, December 21, 1926, was 18¾d.

a 4,661 b 165,856 c 171,547 d 81,002 e 3,150,857 f 2,933,187

(b) *Précis of Reports on the London Market recived on Monday, December 20, and covering the seven days ending Tuesday, November 30 :—*

1. *Tea.*—There was a general decline throughout the market during the seven days under review : even Pekoes, which have been particularly active of late, sharing in the fall. Nevertheless, as the figures on the previous page indicate, South Indians of the best quality fetched a satisfactory price. No public auctions are to be held between the 16th instant and the 3rd proximo. Although plucking ceased on the 20th ultimo, yet November figures for North India show an increase of six million pounds over those for the same month last year.

2. *Rubber.*—For the first time for many months, London stocks showed a decrease of 694 tons falling from 44,553 to 43,859 tons. The deliveries were unusually heavy in view of the conditions which now prevail, and stood at 3,221 tons. The 'spot' quotation on the 30th ultimo was 18½*d.* The U.S.A. Department of Commerce states that 288,842 motor cars were manufactured during October 1926 as compared with 350,913 during the previous month and 394,056 in October 1925, and adds that the output of lorries shows a similar decline. Despite this falling off in October, however, the output of both passenger-cars and lorries was greater during the first ten months of 1926 than in the corresponding period of last year. 3,407,411 passenger-cars were produced during this period as against 3,089,153 during the corresponding ten months of 1925.

3. *Coffee.*—The sole parcel of East Indians on offer at the public auctions was held over for better prices ; but a few small lots of old import were sold at fully previous, and indeed slightly firmer, rates. In fact the Home trade is reported to be very short of coffee, and to be prepared to give higher prices for any qualities which meet their needs. The London stocks of African, Indian, and other kinds, on Saturday, November 27th were given in bags as 16,026, 6,634, and 57,849 respectively as against 33,852, 25,586, and 83,151, on the corresponding date last year.

4. *Pepper.*—The market remained steady but quiet ; with fair 'Tellicherry' quoted at 13*d.*

5. *Cardamoms.*—The market is reported to be very inert.

II. Weekly Rainfall Statement

From Sunday, December 12, 1926 to Saturday, December 18, 1926 (both days inclusive).

Stations are arranged in order approximately south to north and those not in planting districts are shown in small capitals.

Stations	W.	P.	Total.	Stations	W.	P.	Total.
1. Thuckalai...	0.43	74.08	74.51	20. Naduvattam	...	94.22	94.22
2. Kalthuritty.	0.97	114.77	115.74	21. Coonoor ...	2.97	34.01	36.98
3. Kallar Bridge.	0.30	132.03	132.33	22. Kotagiri ...	1.47	50.82	52.29
4. Tenmalai ...	1.58	112.60	114.18	23. Ootacamund	0.16	43.47	43.63
5. Mundakayam.	2.18	150.44	152.62	24. Yercaud ...	...	46.06	46.06
6. Peermade ...	0.52	178.48	179.00	25. Devala ...	N.R.	N.R.	N.R.
7. Twyford ...	0.58	198.00	198.58	26. Gudalur ...	0.31	78.83	79.14
8. V'periyar ...	0.29	79.98	80.27	27. CALICUT ...	...	123.31	123.31
9. Kalaar ...	2.51	195.60	198.11	28. Kuttiyadi ...	...	163.40	163.40
10. Chittuvurrai	0.03	40.38	40.41	29. Vayittiri ...	...	185.43	185.43
11. BODI'KANUR	0.42	23.14	23.56	30. Manantoddi.	...	105.20	105.20
12. COCHIN	0.28	120.82	121.10	31. Billigiris ...	...	51.07	51.07
13. Mooply Valley,	...	129.57	129.57	32. Sidapur ...	...	74.44	74.44
14. Pachaimalai.	...	123.21	123.21	33. Pollibetta ...	...	97.29	97.29
15. Mudis ...	1.01	231.40	232.41	34. Somwarpett.	0.03	70.56	70.59
16. Nell'pathy...	...	99.39	99.39	35. Ballupete ...	..	65.47	65.47
17. POLLACHIE	...	31.82	31.82	36. MANGALORE	...	114.70	114.70
18. Manjeri ...	...	136.25	136.25	37. MADRAS ...	0.08	29.73	29.81
19. Nilambur ...	...	118.78	118.78				

W=During the week.

P=Previously.

N. R.=No return received.

(i. e. from April 4, 1926)

COMMERCIAL AND METEOROLOGICAL—(continued).

The following report on the Madras Market and list of selected Share quotations are made available to us through the courtesy of Messrs. Huson, Tod & Co. :—

III. The Madras Market Report

(For the week ending Thursday, December 23, 1926)

(A) EXCHANGE

After the stagnation of the past many weeks, and it continued up to Monday, 20th instant, a rapid change has come over the Exchange market. Whereas 1s. 5 3/4d. was, up to the end of last week, the best rate available for remittance on London, some Banks to-day are good sellers at 1s. 5 15/16d., and whereas there were buyers of three months' Credits at 1s. 6 1/16d. for December delivery, there is no better than 1s. 6 1/4d. available to-day. The deflation of the currency which has been effected since the 1st April last amounts to a total 24.84 Crores, and hitherto has not affected Exchange at all because it was merely taking off the market superfluous currency. Now, however, with the demand for money relatively small for the time of year, the effect is very considerable, and money may be termed tight. There has been a fair showing of bills in Calcutta, and heavy selling orders have been placed in Bombay with the natural result that Exchange has risen sharply. The position at the moment is that the Banks are not good buyers without cover except at outside rates. The rise in Exchange was expected late in January or in February but not so early as this, and consequently, has taken the markets by surprise. The closing rates to-day for selling T.T. on London are 1s. 5 15/16d. December, 1s. 5 31/32d. January, 1s. 6d. February/March, 1s. 5 31/32d. April and 1s. 5 15/16d. May/September. There are buyers of three months' Credits at no better than 1s. 6 1/4d. December delivery, 1s. 6 9/32d. January, 1s. 6 5/16d. February/April and 1s. 6 9/32d. May/September.

(B) MONEY

Is in much better demand although quotations are only slightly steadier as yet. There are good borrowers of Call at 2 per cent, three months at 3 per cent, six and twelve months at 4 per cent. The Imperial Bank rate is unchanged at 4 per cent and the percentage of cash to liabilities is down to 33.28 compared with 38.33 last week. After the last sharp rise in Government Securities, rates are fairly steady with a slight movement against holders.

IV. Selected Madras Market Quotations

For the week ending Wednesday, December 22, 1926

	Buyers	Sellers
BANKS		
Bangalore Banks Rs. 10	10½	10¾
Bank of Mysore Rs. 100	165	170
Indian Banks (Rs. 100) Rs. 50	67	70
Indian Banks (Rs. 100) Rs. 10	13¼	14
Central Bank (Rs. 50) Rs. 25	31	32½
Imperial Bank of India (Rs. 500)	1550	1560
" " " (Rs. 125)	400	405
Chartered Bank £5	£ 19-10-6	£ 20-5-0
Eastern Bank (£10) £5	£ 6	£ 6-5-0
Mercantile Bank (£25-A) £12½	£ 28	£ 28-10-0
" " (£25-B) £12½	£ 28	£ 28-10-0
" " (£5-C) £5	£ 13-5-0	£ 13-15-0
National Bank (£25) £12½	£ 47	£ 48-5-0
P. and O. Bank £10	£ 10-10-0	£ 11
MILLS		
Bangalore W. C. and S. Ord. (Rs. 100)	...	...
Bangalore W. C. and S. 6 per cent. Prefs. (Rs. 100)	94	98
Buckingham and Carnatic Ord. Rs. 100	190	195
Buckingham and Carnatic 7½ per cent. Prefs. Rs. 100	125	...
Coimbatore Rs. 100	157	...
Coimbatore Mills Rs. 85	75	80
Gokaks Rs. 100	116	120
Maduras Rs. 100	420	425
INDUSTRIALS		
Deccan Sugar Ord. Rs. 100	185	200
Deccan Sugar 7 per cent. Cum. Prefs. Rs. 100	110	112½
E. I. Distilleries and Sugar Factories Ord. £0-16-0	15s.	17s.
E.I.D. 7 per cent. Cum. Prefs. £1 (Madras Register.)	13-2-0	13½
Indian Aluminiums Rs. 100	57½	62½
Malabar Match (Rs. 10) Rs. 7	1	1½
Marshall Sons & Co. Rs. 10	3-4-0	3-6-0
Singareni Collieries, Rs. 10	9¼	Par
W. E. Smith Ord. Rs. 100	50	52½
W. E. Smith 6 per cent. Prefs. Rs. 100	85	86
Spencers Ord. Rs. 100	142½	150
Spencers 6 per cent. Prefs. Rs. 100	99	100
Spencers 7½ per cent. 2nd Prefs. Rs. 100	120	122½
Tata Iron and Steel Ord. Rs. 75	72	76
" " " 7½ per cent. 2nd Prefs. (Rs. 100)	83	85
United Breweries Ord. Rs. 75	132½ x.D.	...
United Breweries 6 per cent. Prefs. Rs. 100	95	97½
PLANTING		
Cochins Rs. 15	49	52½
Eddivannas Rs. 15	29½	31
Kalasas (Rs. 15) Rs. 9	8½	9
Kinalurs Rs. 10	32	33
Kuttiadis Rs. 15	20	21
Malankaras Rs. 30	100 x.D.	104 x.D.
Peermades Ord. Rs. 10	27½	28
Peria Karamalais Rs. 15	46 c.R.	47 c.R.
Periasholas Rs. 10	6	7
Periyars Rs. 10	18	20
Pudukads Rs. 15	48 x.D.	52 x.D.
Rockwoods Rs. 10	3½	4½
Thodapuzhas Rs. 10	31	33
Thirumbadis Rs. 10	22	24
Tropical Plantations (Rs. 25) Rs. 22½	18	19½
United Nilgiris Rs. 100	115 c.D.	117½ c.D.
Vellamalais (Rs. 15)	14	15

D.T.

